

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, 2020

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 001-13175

VALERO ENERGY CORPORATION

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

74-1828067
(I.R.S. Employer
Identification No.)

**One Valero Way
San Antonio, Texas 78249**

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(210) 345-2000**

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

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common stock	VLO	New York Stock Exchange

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes No

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

Large accelerated filer Accelerated filer Non-accelerated filer
Smaller reporting company Emerging growth company

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

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

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

The aggregate market value of the voting and non-voting common stock held by non-affiliates was approximately \$24.0 billion based on the last sales price quoted as of June 30, 2020 on the New York Stock Exchange, the last business day of the registrant's most recently completed second fiscal quarter.

As of February 19, 2021, 408,562,891 shares of the registrant's common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

We intend to file with the Securities and Exchange Commission a definitive Proxy Statement for our Annual Meeting of Stockholders scheduled for April 29, 2021, at which directors will be elected. Portions of the 2021 Proxy Statement are incorporated by reference in Part III of this Form 10-K and are deemed to be a part of this report.

CROSS-REFERENCE SHEET

The following table indicates the headings in the 2021 Proxy Statement where certain information required in Part III of this Form 10-K may be found.

<u>Form 10-K Item No. and Caption</u>	<u>Heading in 2021 Proxy Statement</u>
10. Directors, Executive Officers and Corporate Governance	<i>Information Regarding the Board of Directors, Independent Directors, Audit Committee, Proposal No. 1 Election of Directors, Information Concerning Nominees and Other Directors, Identification of Executive Officers, and Governance Documents and Codes of Ethics</i>
11. Executive Compensation	<i>Compensation Committee, Compensation Discussion and Analysis, Executive Compensation, Director Compensation, Pay Ratio Disclosure, and Certain Relationships and Related Transactions</i>
12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	<i>Beneficial Ownership of Valero Securities and Equity Compensation Plan Information</i>
13. Certain Relationships and Related Transactions, and Director Independence	<i>Certain Relationships and Related Transactions and Independent Directors</i>
14. Principal Accountant Fees and Services	<i>KPMG LLP Fees and Audit Committee Pre-Approval Policy</i>

Copies of all documents incorporated by reference, other than exhibits to such documents, will be provided without charge to each person who receives a copy of this Form 10-K upon written request to Valero Energy Corporation, Attn: Secretary, P.O. Box 696000, San Antonio, Texas 78269-6000.

CONTENTS

	<u>PAGE</u>
<u>PART I</u>	<u>1</u>
<u>Items 1. & 2.</u>	<u>1</u>
<u>Business and Properties</u>	<u>1</u>
<u>Overview</u>	<u>1</u>
<u>Available Information</u>	<u>1</u>
<u>Environmental Stewardship</u>	<u>2</u>
<u>Valero's Operations</u>	<u>3</u>
<u>Government Regulations</u>	<u>10</u>
<u>Human Capital</u>	<u>11</u>
<u>Properties</u>	<u>13</u>
<u>Item 1A.</u>	<u>13</u>
<u>Item 1B.</u>	<u>25</u>
<u>Item 3.</u>	<u>26</u>
<u>Item 4.</u>	<u>26</u>
 <u>PART II</u>	 <u>27</u>
<u>Item 5.</u>	<u>27</u>
<u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>27</u>
<u>Item 6.</u>	<u>29</u>
<u>Selected Financial Data</u>	<u>29</u>
<u>Item 7.</u>	<u>30</u>
<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>30</u>
<u>Item 7A.</u>	<u>58</u>
<u>Quantitative and Qualitative Disclosures About Market Risk</u>	<u>58</u>
<u>Item 8.</u>	<u>61</u>
<u>Financial Statements and Supplementary Data</u>	<u>61</u>
<u>Item 9.</u>	<u>139</u>
<u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>139</u>
<u>Item 9A.</u>	<u>139</u>
<u>Controls and Procedures</u>	<u>139</u>
<u>Item 9B.</u>	<u>139</u>
<u>Other Information</u>	<u>139</u>
 <u>PART III</u>	 <u>139</u>
<u>Item 10.</u>	<u>139</u>
<u>Directors, Executive Officers and Corporate Governance</u>	<u>139</u>
<u>Item 11.</u>	<u>139</u>
<u>Executive Compensation</u>	<u>139</u>
<u>Item 12.</u>	<u>139</u>
<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>139</u>
<u>Item 13.</u>	<u>139</u>
<u>Certain Relationships and Related Transactions, and Director Independence</u>	<u>139</u>
<u>Item 14.</u>	<u>139</u>
<u>Principal Accountant Fees and Services</u>	<u>139</u>
 <u>PART IV</u>	 <u>140</u>
<u>Item 15.</u>	<u>140</u>
<u>Exhibits and Financial Statement Schedules</u>	<u>140</u>
 <u>Signature</u>	 <u>144</u>

The terms “Valero,” “we,” “our,” and “us,” as used in this report, may refer to Valero Energy Corporation, to one or more of its consolidated subsidiaries, or to all of them taken as a whole. In this Form 10-K, we make certain forward-looking statements, including statements regarding our plans, strategies, objectives, expectations, intentions, and resources under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. You should read our forward-looking statements together with our disclosures beginning on page 30 of this report under the heading: “CAUTIONARY STATEMENT FOR THE PURPOSE OF SAFE HARBOR PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995.”

PART I

ITEMS 1. and 2. BUSINESS AND PROPERTIES

OVERVIEW

We are a Fortune 500 company based in San Antonio, Texas. Our corporate offices are at One Valero Way, San Antonio, Texas, 78249, and our telephone number is (210) 345-2000. We were incorporated in Delaware in 1981 under the name Valero Refining and Marketing Company. We changed our name to Valero Energy Corporation in 1997. Our common stock trades on the New York Stock Exchange (NYSE) under the trading symbol “VLO.”

We own 15 petroleum refineries that produce conventional gasolines, premium gasolines, reformulated gasoline, gasoline meeting the specifications of the California Air Resources Board (CARB), diesel, low-sulfur diesel, ultra-low-sulfur diesel, CARB diesel, other distillates, jet fuel, asphalt, petrochemicals, lubricants, and other refined petroleum products. We are also a joint venture partner in Diamond Green Diesel Holdings LLC (DGD)¹, which owns a plant that produces renewable diesel. We also own 13 ethanol plants that produce ethanol and various co-products. Renewable diesel and ethanol are both low-carbon transportation fuels. We sell our products primarily in the United States (U.S.), Canada, the United Kingdom (U.K.), Ireland, and Latin America. See “VALERO’S OPERATIONS” for additional information about our operations and properties.

AVAILABLE INFORMATION

Our website address is www.valero.com. Information (including any presentation or report) on our website is not part of, and is not incorporated into, this report or any other report we may file with (or furnish to) the U.S. Securities and Exchange Commission (SEC), whether made before or after the date of this Annual Report on Form 10-K and irrespective of any general incorporation language therein. Furthermore, references to our website URLs are intended to be inactive textual references only. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and other reports, as well as any amendments to those reports, filed with (or furnished to) the U.S. SEC are available on our website (under Investors > Financials > SEC Filings) free of charge, soon after we file or furnish such material. Additionally, on our website (under Investors > ESG), we post our corporate governance guidelines and other governance policies, codes of ethics, and the charters of the committees of our board of directors. In this same location, we also publish our Environmental, Social and Governance (ESG) company overview, our Sustainability Accounting Standards Board (SASB) Report, our Stewardship and Responsibility Report, and our Review of Climate-Related Risks and Opportunities.

¹ DGD is a joint venture with Darling Ingredients Inc. (Darling) and we consolidate DGD’s financial statements. See Note 13 of Notes to Consolidated Financial Statements, which is incorporated herein by reference, regarding our accounting for DGD.

These documents are available in print to any stockholder that makes a written request to Valero Energy Corporation, Attn: Secretary, P.O. Box 696000, San Antonio, Texas 78269-6000.

ENVIRONMENTAL STEWARDSHIP

Our Goals

We strive to manage our business to responsibly meet the world's demand for reliable and affordable energy and have made multibillion-dollar investments to develop and grow our low-carbon renewable diesel and ethanol businesses. These renewable fuels businesses have made us one of the world's largest renewable fuels producers. Even so, we continually seek to find ways to reduce the environmental impact of all of our operations and improve our ESG practices.

Renewable Fuels

We have invested over \$3 billion² to date in our renewable fuels businesses, and we expect additional growth opportunities in this area. For example, we expect to invest almost \$2 billion³ over the next three years to complete the expansion of DGD's existing renewable diesel plant located next to our St. Charles Refinery in Norco, Louisiana (the DGD Plant) and to build DGD's second plant next to our Port Arthur Refinery in Port Arthur, Texas. See "VALERO'S OPERATIONS—RENEWABLE DIESEL" for additional information about the expansion of our renewable diesel business.

We believe that the growth of our renewable fuels businesses not only provides a good business opportunity, but it is also an opportunity for us to produce fuels that reduce carbon emissions. Renewable diesel and ethanol are low-carbon transportation fuels that have the potential to result in meaningful reductions in life cycle carbon emissions compared to traditional diesel and non-blended gasoline. Blending and credits with respect to renewable fuels may also help offset greenhouse gas (GHG) emissions. Additionally, many state, provincial, and national governments across the world have implemented, or are considering implementing, low-carbon fuel policies and stricter fuel efficiency standards to help reach GHG emissions reduction targets. This has helped, and should continue to help, drive the demand for both renewable diesel and ethanol, and we believe that our ability to supply these renewable fuels could play an important role in helping achieve such GHG emissions reduction targets.

Reports

We publish and make available on our website various climate-related reports and presentations. These include:

- our presentation providing an ESG overview of our company,
- our SASB Report, which aligns Valero's performance data with the recommendations of the SASB framework in the Oil and Gas – Refining and Marketing industry standard,
- our Stewardship and Responsibility Report, and

² Our investment to date in our renewable fuels businesses consists of \$1.4 billion in capital investments to build our renewable diesel business and \$1.7 billion to build our ethanol business. Capital investments in renewable diesel represent 100 percent of the capital investments made by DGD. DGD is our consolidated joint venture, which is described in "OVERVIEW" above. See also "MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS—LIQUIDITY AND CAPITAL RESOURCES—*Capital Investments*," which is incorporated herein by reference for our definition of capital investments.

³ Represents 100 percent of DGD's expected capital investments from January 1, 2021 through December 31, 2023 related to the expansion of its existing renewable diesel plant and the construction of its second plant. See footnote 2 above.

- our Review of Climate-Related Risks and Opportunities, which is aligned with the main principles outlined in the recommendations of the Financial Stability Board’s Task Force on Climate-related Financial Disclosure.

See “—AVAILABLE INFORMATION” above.

VALERO’S OPERATIONS

Our operations are managed through the following reportable segments:⁴

- our *refining* segment, which includes the operations of our petroleum refineries, the associated activities to market our refined petroleum products, and the logistics assets that support those operations;
- our *renewable diesel* segment, which includes the operations of DGD and the associated activities to market renewable diesel; and
- our *ethanol* segment, which includes the operations of our ethanol plants, the associated activities to market our ethanol and co-products, and the logistics assets that support those operations.

Financial information about these segments is presented in Note 18 of Notes to Consolidated Financial Statements, which is incorporated herein by reference.

⁴ We revised our reportable segments effective January 1, 2019 to align with certain changes in how our chief operating decision maker manages and allocates resources to our business. Accordingly, we created the renewable diesel segment because of the growth of renewable fuels in the market and the growth in our investments in renewable fuels production. The renewable diesel operations were transferred from the refining segment on January 1, 2019. At the same time, we combined our Valero Energy Partners LP (VLP) segment into our refining segment. This change was made because of the Merger Transaction with VLP, as defined and discussed in Note 3 of Notes to Consolidated Financial Statements, which is incorporated herein by reference, and the resulting change in how we manage VLP’s operations. We no longer manage VLP as a business but as logistics assets that support the operations of our refining segment.

REFINING

Refineries

Overview

Our 15 petroleum refineries are located in the U.S., Canada, and the U.K., and they have a combined feedstock throughput capacity of approximately 3.2 million barrels per day (BPD). The following table presents the locations of these refineries and their feedstock throughput capacities as of December 31, 2020.

Refinery	Location	Throughput Capacity (a) (BPD)
U.S.		
Benicia	California	170,000
Wilmington	California	135,000
Meraux	Louisiana	135,000
St. Charles	Louisiana	340,000
Ardmore	Oklahoma	90,000
Memphis	Tennessee	195,000
Corpus Christi (b)	Texas	370,000
Houston	Texas	255,000
McKee	Texas	200,000
Port Arthur	Texas	395,000
Texas City	Texas	260,000
Three Rivers	Texas	100,000
Canada		
Quebec City	Quebec	235,000
U.K.		
Pembroke	Wales	270,000
Total		3,150,000

(a) “Throughput capacity” represents estimated capacity for processing crude oil, intermediates, and other feedstocks. Total estimated crude oil capacity is approximately 2.6 million BPD.

(b) Represents the combined capacities of two refineries – the Corpus Christi East and Corpus Christi West Refineries.

California

- ***Benicia Refinery.*** Our Benicia Refinery is located northeast of San Francisco on the Carquinez Straits of San Francisco Bay. It processes sour crude oils into gasoline, diesel, jet fuel, and asphalt. Gasoline production is primarily California Reformulated Blendstock Gasoline for Oxygenate Blending (CARBOB), which meets CARB specifications when blended with ethanol. The refinery receives crude oil feedstocks via a marine dock and crude oil pipelines connected to a southern California crude oil delivery system. Most of the refinery’s products are distributed via pipeline and truck rack into northern California markets.
- ***Wilmington Refinery.*** Our Wilmington Refinery is located near Los Angeles. The refinery processes a blend of heavy and high-sulfur crude oils. The refinery produces CARBOB gasoline, diesel, CARB diesel, jet fuel, and asphalt. The refinery is connected by pipeline to marine terminals and associated dock facilities that move and store crude oil and other feedstocks.

Refined petroleum products are distributed via pipeline systems to various third-party terminals in Southern California, Nevada, and Arizona.

Louisiana

- *Meraux Refinery*. Our Meraux Refinery is located approximately 15 miles southeast of New Orleans along the Mississippi River. The refinery processes sour and sweet crude oils into gasoline, diesel, jet fuel, and high sulfur fuel oil. The refinery receives crude oil at its dock and has access to the Louisiana Offshore Oil Port. Finished products are shipped from the refinery's dock and through the Colonial pipeline. The refinery is located about 40 miles from our St. Charles Refinery, allowing for integration of feedstocks and refined petroleum product blending.
- *St. Charles Refinery*. Our St. Charles Refinery is located approximately 25 miles west of New Orleans along the Mississippi River. The refinery successfully commissioned a new alkylation unit in the fourth quarter of 2020. The refinery processes sour crude oils and other feedstocks into gasoline and diesel. The refinery receives crude oil over docks and has access to the Louisiana Offshore Oil Port. Finished products are shipped over these docks and through our Parkway pipeline and the Bengal pipeline, which ultimately provide access to the Plantation and Colonial pipeline networks.

Oklahoma

- *Ardmore Refinery*. Our Ardmore Refinery is located approximately 100 miles south of Oklahoma City. It processes sweet and sour crude oils into gasoline and diesel. The refinery predominantly receives Permian Basin and Cushing-sourced crude oil via third-party pipelines. Refined petroleum products are transported via rail, trucks, and the Magellan pipeline system.

Tennessee

- *Memphis Refinery*. Our Memphis Refinery is located along the Mississippi River. It processes primarily sweet crude oils. Most of its production is gasoline, diesel, and jet fuels. Crude oil supply is primarily Cushing-sourced via the Diamond pipeline. Crude oil can also be received, along with other feedstocks, via the Dakota Access pipeline and barge. Most of the refinery's products are distributed via truck rack and barges.

Texas

- *Corpus Christi East and West Refineries*. Our Corpus Christi East and West Refineries are located on the Texas Gulf Coast along the Corpus Christi Ship Channel. The East Refinery processes sour crude oil, and the West Refinery processes sweet crude oil, sour crude oil, and residual fuel oil. The feedstocks are delivered by tanker and barge via deepwater docking facilities along the Corpus Christi Ship Channel, and West Texas or South Texas crude oil is delivered via pipelines. The refineries' physical locations allow for the transfer of various feedstocks and blending components between them. The refineries produce gasoline, aromatics, jet fuel, diesel, and asphalt. Truck racks service local markets for gasoline, diesel, jet fuels, liquefied petroleum gases, and asphalt. These and other finished products are also distributed by ship and barge across docks and third-party pipelines.
- *Houston Refinery*. Our Houston Refinery is located on the Houston Ship Channel. It processes sweet crude and intermediate oils into gasoline, jet fuel, and diesel. The refinery receives its feedstocks primarily by various interconnecting pipelines and also has waterborne-receiving capability at deepwater docking facilities along the Houston Ship Channel. The majority of its

finished products are delivered to local, mid-continent U.S., and northeastern U.S. markets through various pipelines, including the Colonial and Explorer pipelines.

- *McKee Refinery*. Our McKee Refinery is located in the Texas Panhandle. It processes primarily sweet crude oils into gasoline, diesel, jet fuels, and asphalt. The refinery has access to local and Permian Basin crude oil sources via third-party pipelines. Refined petroleum products are transported primarily via third-party pipelines and rail to markets in Texas, New Mexico, Arizona, Colorado, Oklahoma, and Mexico.
- *Port Arthur Refinery*. Our Port Arthur Refinery is located on the Texas Gulf Coast approximately 90 miles east of Houston. The refinery processes heavy sour crude oils and other feedstocks into gasoline, diesel, and jet fuel. The refinery receives crude oil by rail, marine docks, and pipelines. Finished products are distributed into the Colonial, Explorer, and other pipelines, and across the refinery docks into ships and barges.
- *Texas City Refinery*. Our Texas City Refinery is located southeast of Houston on the Houston Ship Channel. The refinery processes crude oils into gasoline, diesel, and jet fuel. The refinery receives its feedstocks by pipeline and by ship or barge via deepwater docking facilities along the Houston Ship Channel. The refinery uses ships and barges, as well as the Colonial, Explorer, and other pipelines for distribution of its products.
- *Three Rivers Refinery*. Our Three Rivers Refinery is located in South Texas between Corpus Christi and San Antonio. It primarily processes sweet crude oils into gasoline, distillates, and aromatics. The refinery receives crude oil from West Texas and South Texas by pipelines and trucks. The refinery distributes its refined petroleum products primarily through third-party pipelines.

Canada

- *Quebec City Refinery*. Our Quebec City Refinery is located in Lévis (near Quebec City). It processes sweet crude oils into gasoline, diesel, jet fuel, heating oil, and low-sulfur fuel oil. The refinery receives crude oil by ship at its deepwater dock on the St. Lawrence River and by pipeline and ship (via the St. Lawrence River from a crude terminal in Montreal) from western Canada. The refinery transports its products through our pipeline from Quebec City to our terminal in Montreal and to various other terminals throughout eastern Canada by rail, ships, trucks, and third-party pipelines.

U.K.

- *Pembroke Refinery*. Our Pembroke Refinery is located in the County of Pembrokeshire in South West Wales. The refinery processes primarily sweet crude oils into gasoline, diesel, jet fuel, heating oil, and low-sulfur fuel oil. The refinery receives all of its feedstocks and delivers some of its products by ship and barge via deepwater docking facilities along the Milford Haven Waterway, with its remaining products being delivered through our Mainline pipeline system and by trucks. The refinery's new cogeneration project is expected to be completed in the third quarter of 2021.

Feedstock Supply

Our crude oil feedstocks are purchased through a combination of term and spot contracts. Our term supply contracts are at market-related prices and feedstocks are purchased directly or indirectly from various national oil companies as well as international and U.S. oil companies. The contracts generally

permit the parties to amend the contracts (or terminate them), effective as of the next scheduled renewal date, by giving the other party proper notice within a prescribed period of time (e.g., 60 days, 6 months) before expiration of the current term. The majority of the crude oil purchased under our term contracts is purchased at the producer's official stated price (i.e., the "market" price established by the seller for all purchasers) and not at a negotiated price specific to us.

Marketing

Overview

We sell refined petroleum products in both the wholesale rack and bulk markets. These sales include refined petroleum products that are manufactured in our refining operations, as well as refined petroleum products purchased or received on exchange from third parties. Most of our refineries have access to marine transportation facilities, and they interconnect with common-carrier pipeline systems, allowing us to sell products in the U.S., Canada, the U.K., and other countries.

Wholesale Rack Sales

We sell our gasoline and distillate products, as well as other products, such as asphalt, lube oils, and natural gas liquids (NGLs), on a wholesale basis through an extensive rack marketing network. The principal purchasers of our refined petroleum products from terminal truck racks are wholesalers, distributors, retailers, and truck-delivered end users throughout the U.S., Canada, the U.K., Ireland, and Latin America.

The majority of our rack volume is sold through unbranded channels. The remainder is sold to distributors and dealers that are members of the Valero-brand family that operate branded sites in the U.S., Canada, the U.K., Ireland, and Latin America. These sites are independently owned and are supplied by us under multi-year contracts. Approximately 7,000 outlets carry our brand names. For branded sites, products are sold under the Valero[®], Beacon[®], Diamond Shamrock[®], and Shamrock[®] brands in the U.S., the Ultramar[®] brand in Canada, the Texaco[®] brand in the U.K. and Ireland, and the Valero[®] brand in Latin America.

Bulk Sales

We also sell our gasoline and distillate products, as well as other products, such as asphalt, petrochemicals, and NGLs, through bulk sales channels in the U.S. and international markets. Our bulk sales are made to various oil companies, traders, and bulk end users, such as railroads, airlines, and utilities. Our bulk sales are transported primarily by pipelines, barges, and tankers to major tank farms and trading hubs.

Logistics

We own logistics assets (crude oil pipelines, refined petroleum product pipelines, terminals, tanks, marine docks, truck rack bays, and other assets) that support our refining operations.

RENEWABLE DIESEL

Our Relationship with DGD

DGD is a joint venture that we consolidate. We entered into the DGD joint venture in 2011. See Note 13 of Notes to Consolidated Financial Statements, which is incorporated herein by reference, regarding our accounting for DGD. We operate the DGD Plant and perform certain management functions for DGD as an independent contractor under an agreement with DGD.

Renewable Diesel Plant

The DGD Plant is located next to our St. Charles Refinery in Norco, Louisiana, and its production capacity is 290 million gallons of renewable diesel per year. Renewable diesel is a low-carbon transportation fuel that is interchangeable with diesel produced from petroleum and is produced from rendered and recycled materials, including animal fats, used cooking oils, and other vegetable oils.

DGD began an expansion of the DGD Plant in 2019, which is expected to increase its renewable diesel production by 400 million gallons per year; construction is expected to be completed in the fourth quarter of 2021. Additionally, in January 2021, we and our joint venture partner approved the construction of a new 470 million gallons per year renewable diesel plant to be located next to our Port Arthur Refinery in Port Arthur, Texas. The new plant is expected to increase DGD's total renewable diesel production capacity to almost 1.2 billion gallons per year.

The DGD Plant receives rendered and recycled materials primarily by rail and trucks owned by third parties. DGD is party to a raw material supply agreement with Darling under which Darling is obligated to offer to DGD a portion of its feedstock requirements at competitive pricing, but DGD is not obligated to purchase all or any part of its feedstock from Darling. Therefore, DGD pursues the lowest cost feedstock supply available. See Item 1A, "RISK FACTORS"—Risks Related to Our Business, Industry, and Operations—*Our investments in joint ventures and other entities decrease our ability to manage risk, and—Disruption of our ability to obtain crude oil, rendered and recycled materials, corn, and other feedstocks could adversely affect our operations*, which are incorporated herein by reference.

Marketing

DGD's renewable diesel is sold under the Diamond Green Diesel® brand primarily to refiners to be blended with petroleum-based diesel. Renewable diesel is also sold to end users for use in their operations. DGD sells renewable diesel domestically and exports renewable diesel into global markets, primarily Canada and Europe. Renewable diesel is distributed primarily by rail and ships owned by third parties. See Item 1A, "RISK FACTORS"—Risks Related to Our Business, Industry, and Operations—*Developments with respect to low-carbon fuel policies and the market for alternative fuels may affect demand for our renewable fuels and could adversely affect our financial performance*, which is incorporated herein by reference.

ETHANOL**Ethanol Plants**

Our ethanol business began in 2009 with the purchase of our first ethanol plants. We have since grown the business by purchasing additional ethanol plants. Our 13 ethanol plants are located in the Mid-Continent region of the U.S., and they have a combined ethanol production capacity of 1.69 billion gallons per year. Our ethanol plants are dry mill facilities that process corn to produce ethanol and various co-products, including livestock feed (dry distillers grains, or DDGs, and syrup), and inedible corn oil.

The following table presents the locations of our ethanol plants, their annual production capacities for ethanol (in millions of gallons) and DDGs (in tons), and their annual corn processing capacities (in millions of bushels).

State	City	Ethanol Production Capacity	DDG Production Capacity	Corn Processing Capacity
Indiana	Bluffton	130	340,000	45
	Linden	135	355,000	47
	Mount Vernon	100	263,000	35
Iowa	Albert City	135	355,000	47
	Charles City	140	368,000	49
	Fort Dodge	140	368,000	49
	Hartley	140	368,000	49
	Lakota	110	289,000	38
Minnesota	Welcome	140	368,000	49
Nebraska	Albion	135	355,000	47
Ohio	Bloomington	135	355,000	47
South Dakota	Aurora	140	368,000	49
Wisconsin	Jefferson	110	352,000	41
Total		1,690	4,504,000	592

The foregoing table excludes data relating to our Riga, Michigan ethanol plant, which ceased operations in 2020.

We source our corn supply from local farmers and commercial elevators. We publish on our website a corn bid for local farmers and cooperative dealers to facilitate corn supply transactions. Our plants receive corn primarily by rail and truck.

Marketing

We sell our ethanol primarily to refiners and gasoline blenders under term and spot contracts in bulk markets such as New York, Chicago, the U.S. Gulf Coast, Florida, and the U.S. West Coast. We also export our ethanol into the global markets. We distribute our ethanol primarily by rail (including some railcars owned by us) and third-party trucks, barges, and vessels. We sell DDGs primarily to animal feed customers in the U.S., Mexico, and Asia, which are transported primarily by third-party rail, trucks, and vessels.

SEASONALITY

Demand for gasoline, diesel, and asphalt is higher during the spring and summer months than during the winter months in most of our markets, primarily due to seasonal increases in highway traffic and construction. The demand for renewable diesel has not significantly fluctuated by season. Ethanol is primarily blended into gasoline, and as a result, ethanol demand typically moves in line with the demand for gasoline.

GOVERNMENT REGULATIONS

We incorporate by reference into this Item the disclosures on government regulations, including environmental regulations, contained in the following sections of this report:

- Item 1A, “RISK FACTORS”—Risks Related to Our Business, Industry, and Operations—*Legal, technological, and political developments and evolving market sentiment regarding fuel efficiency and low-carbon fuel standards may decrease the demand for our products and could adversely affect our performance;*
- Item 1A, “RISK FACTORS”—Legal, Governmental, and Regulatory Risks; and
- Item 3, “LEGAL PROCEEDINGS”—ENVIRONMENTAL ENFORCEMENT MATTERS.

Capital Expenditures Attributable to Compliance with Government Regulations. In 2020, our capital expenditures attributable to compliance with environmental regulations were \$27 million, and they are currently estimated to be \$13 million for 2021 and \$24 million for 2022. The estimates for 2021 and 2022 do not include amounts related to capital investments at our refineries and plants that management has deemed to be strategic investments. These amounts could materially change as a result of governmental and regulatory actions. We have incurred significant capital expenditures in prior years to comply with government regulations; however, we do not believe that compliance with government regulations, including environmental regulations, had a material effect on our capital expenditures in 2020, and we currently do not expect that compliance with these regulations will have material effects on our capital expenditures in 2021.

Other. Because our business is heavily regulated, our costs for compliance with government regulations are significant, especially costs associated with environmental compliance programs, which are further disclosed in Notes 20 and 21 of Notes to Consolidated Financial Statements, which are incorporated herein by reference.

HUMAN CAPITAL

We believe that our employees provide a competitive advantage for our success. We seek to foster a culture that supports diversity and inclusion, and we strive to provide a safe, healthy, and rewarding work environment with opportunities for professional growth and long-term financial stability.

Headcount

On January 31, 2021, we had 9,964 employees. These employees were located in the following countries:

Country	Number of Employees
U.S.	8,326
Canada	642
U.K. and Ireland	855
Mexico and Peru	141
Total	9,964

Of our total employees as of January 31, 2021, 1,768 were covered by collective bargaining or similar agreements, and 9,803 were in permanent full-time positions. See also Item 1A, “RISK FACTORS”—General Risk Factors—*Our business may be negatively affected by work stoppages, slowdowns, or strikes by our employees, as well as new labor legislation issued by regulators.*

Safety

We believe that safety and reliability are extremely important, not only to the cultural values we aspire to as a company, but also for operational success, as a decrease in the number of employee safety events and process safety events should generally reduce unplanned shutdowns and increase the operational reliability of our plants. This, in turn, should also translate into fewer environmental incidents, a safer workplace, lower environmental impacts, and better community relations. We strive to improve safety and reliability by offering year-round safety training programs for our employees and contractors and by seeking to promote the same expectations and culture of safety among all of our workers. We also seek to enhance our safety compliance by conducting audits, quality assurance visits, and comprehensive risk assessments.

In assessing safety performance, we measure our annual total recordable incident rate (TRIR), which includes data with respect to our employees and contractors and is defined as the number of recordable injuries per 200,000 working hours. We also annually measure our Tier 1 Process Safety Event Rate, which is a metric defined by the American Petroleum Institute that looks at process safety events per 200,000 total employee and contractor working hours. We use these measures and believe they are helpful in assessing our safety performance because they evaluate performance relative to the numbers of hours being worked. These metrics are also used by others in our industry, which allows for a more objective comparison of our performance. In 2020, our employee and contractor TRIR was 0.34 and 0.15, respectively, and our Tier 1 Process Safety Event Rate was 0.06. As a result, in 2020 we had one of our best years ever in terms of safety performance.

Compensation and Benefits

We believe that it is important to provide our employees with competitive compensation and benefits. The benefits we offer to employees, depending on work location and eligibility status, include, among others, healthcare plans that are generally available to all employees, extended sick leave, new-parent leave, access to financial planning, programs to support dual working parents at different stages of their careers,

caregiver support networks (including an on-site child care center at our headquarters) and support for children and parents with disabilities, a company 401(k) matching program, a company-sponsored pension plan, on-site employee wellness centers (also available to eligible dependents at our headquarters), tuition reimbursement programs, fitness center access or a stipend, and employee recognition programs.

We believe that it is important to reward employee performance and have an annual bonus program that rewards achievements of various operational, financial, and strategic objectives. While such objectives include more typical financial performance metrics such as earnings per share and cash operating expenses, we believe ESG performance is also important and our annual bonus program rewards achievements in areas such as sustainability, diversity and inclusion, compliance, and corporate citizenship.

Training and Development

We offer a comprehensive training and development program for our employees in subjects ranging from engineering and technical excellence, safety, maintenance and machinery/equipment repair to ethics, leadership, and employee performance. Our employee development initiatives include customized professional and technical curriculums, efforts to engage our leadership in the employee's development process, and providing employee performance discussions.

Wellness

We strive to promote the health and well-being of our employees and their families. Our Total Wellness Program serves as the umbrella program for all aspects of employee wellness and is the program through which many of the benefits referenced above are provided. The heart of our Total Wellness Program is the annual wellness assessment, which is intended to provide a detailed picture of an employee's current health that may educate and inform health decisions by highlighting risk factors and providing information that can help save lives. A few of the many resources provided with this annual assessment may include a body composition analysis, an online nutritional analysis, lab work, and a sleep analysis. Under our Total Wellness Program, educational sessions are also scheduled throughout the year on a variety of topics on health and finances.

We are also proud to offer no-cost assistance and a wide range of support through our confidential employee assistance program, helping employees and their families manage relationship challenges, counseling needs, substance abuse and recovery, as well as self-care programs for various behavioral health challenges. In addition, during times of crisis (such as the COVID-19 pandemic), certain of our benefit partners offer toll-free, 24-hour access to emotional support help lines.

Diversity, Equality, and Inclusion

We believe that having a diverse workforce and inclusive teams provides strengths and advantages for our success, and our board of directors and management team strive to promote and improve diversity and inclusion. As of January 31, 2021, approximately 29 percent of our professional employees were female, 11 percent of our hourly employees were female, and 19 percent of total employees were female. Approximately 35 percent of our U.S. employees have self-identified as Hispanic or Latino, Black or African American, Asian, American Indian or Alaskan Native, Native Hawaiian or Other Pacific Islander, or of two or more races. We strive to recruit and retain a diverse workforce and foster a culture of inclusion through various efforts, including targeted recruiting strategies aimed at improving our outreach to underrepresented groups and educational and training programs on topics such as objective hiring and the advantages of a diverse workforce.

PROPERTIES

Our principal properties are described above under the caption “VALERO’S OPERATIONS,” and that information is incorporated herein by reference. We believe that our properties are generally adequate for our operations and that our refineries and plants are maintained in a good state of repair. As of December 31, 2020, we were the lessee under a number of cancelable and noncancelable leases for certain properties. Our leases are discussed in Note 6 of Notes to Consolidated Financial Statements, which is incorporated herein by reference. Financial information about our properties is presented in Note 7 of Notes to Consolidated Financial Statements, which is incorporated herein by reference.

Our patents relating to our refining operations are not material to us as a whole. The trademarks and tradenames under which we conduct our branded wholesale business — Valero[®], Diamond Shamrock[®], Shamrock[®], Ultramar[®], Beacon[®], and Texaco[®]— and other trademarks employed in the marketing of refined petroleum products are integral to our wholesale rack marketing operations. The trademark and tradename under which DGD sells its renewable diesel — Diamond Green Diesel[®] — is integral to the sales of our renewable diesel segment.

ITEM 1A. RISK FACTORS

You should carefully consider the following risk factors in addition to the other information included in this report. Each of these risk factors could adversely affect our business, operating results, and/or financial condition, as well as adversely affect the value of an investment in our common stock or debt securities.

Risks Related to COVID-19

The outbreak of COVID-19 has had, and may continue to have, material adverse consequences for general economic, financial, and business conditions, and could materially and adversely affect our business, financial condition, results of operations, and liquidity and those of our customers, suppliers, and other counterparties.

The outbreak of COVID-19 and the responses of governmental authorities and companies, as well as the self-imposed restrictions by many individuals across the world to stem the spread of the virus, have significantly reduced global economic activity; as a result, there has been a dramatic decrease in the number of businesses open for operation, and substantially fewer people across the world have been traveling to work or leaving their homes to procure or provide goods and services. This has resulted, for example, in a dramatic reduction in airline flights and has reduced the number of cars on the road. As a result, there has been a decline in the demand for, and thus also the market prices of, crude oil and certain of our products, particularly the refined petroleum products that we manufacture and sell.

Concerns over the negative effects of the COVID-19 pandemic on economic and business prospects across the world have contributed to increased market and crude oil price volatility and have diminished expectations for the global economy. These factors, coupled with the emergence of decreasing business and consumer confidence and increasing unemployment resulting from the COVID-19 outbreak and the increase in crude oil price volatility, have precipitated an economic slowdown. The current economic slowdown and period of depressed prices for crude oil and most of our products has had, and may continue to have, significant adverse consequences on our financial condition and the financial condition of our customers, suppliers, and other counterparties. This has also had, and may continue to have, a

negative effect on our liquidity and our ability to obtain adequate crude oil volumes and other feedstock supplies and to market certain of our products at favorable prices, or at all.

Declines in the market prices of crude oil, other feedstocks, and products below their carrying values in our inventory have required, and may continue to require, us to make certain valuation adjustments (e.g., lower of cost or market (LCM) inventory valuation adjustments) to write down the value of our inventories. This has in turn had, and may continue to have, a negative impact on our operating income. The decline in the price of the refined products we sell and the feedstocks we purchase has had, and may continue to have, an adverse impact on other areas of our business and results of operation, such as our revenues and cost of sales. In addition, a sustained period of low crude oil prices, such as we experienced in 2020, may also result in significant financial constraints on certain producers from which we acquire our crude oil, which could result in long term crude oil supply constraints for our business. Such conditions could also result in an increased risk that customers, lenders, service and insurance providers, and other counterparties, such as counterparties to our commodity hedging or derivative instruments, or other agreements vital to our operations, may be unable to fully fulfil their obligations in a timely manner, or at all. Any of the foregoing events or conditions, or other unforeseen consequences of COVID-19, could significantly adversely affect our business and financial condition and the business and financial condition of our customers, suppliers, and other counterparties.

While in the latter part of the second quarter of 2020 certain governmental authorities in the U.S. and abroad began lifting many of the restrictions put in place to slow the spread of COVID-19, which resulted in an increase in the demand and market prices for most of our products relative to what we experienced during the first several months of the pandemic, developments with respect to COVID-19 have been occurring at a rapid pace and the risk remains that circumstances could change. For instance, many locations where restrictions were lifted, and others where the restrictions were more moderately lifted (such as California in our U.S. West Coast region, and New York, Canada, and the U.K. in our North Atlantic region), have experienced a resurgence in the spread of COVID-19 prompting many governmental authorities to re-impose certain restrictions that had previously been lifted or softened. In addition, in December 2020, the U.S. Food and Drug Administration (FDA) and Canadian and U.K. regulators each granted emergency-use authorization for multiple COVID-19 vaccines to be used as immunization against the virus. Although these vaccines may be seen as a key factor in helping to restore public confidence, and thus stimulate and increase economic activity, potentially to pre-pandemic levels, they may not be distributed widely on a timely basis and they may not be effective against new variants of the COVID-19 virus.

Many uncertainties remain with respect to COVID-19, including its resulting economic effects, and we are unable to predict the ultimate economic impacts from COVID-19 on our business and how quickly national economies can recover once the pandemic subsides, the timing or effectiveness of vaccine distributions, the potential for new variants of the virus or whether any recovery will ultimately experience a reversal or other setbacks. The ultimate extent of the impact of the COVID-19 pandemic will depend largely on future developments, particularly within the geographic areas where we operate, and the related impact on overall economic activity, all of which are currently unknown and cannot be predicted with certainty at this time. However, the adverse impacts of the economic effects from the COVID-19 pandemic and the uncertainty in the global oil markets on our business have been and will likely continue to be significant.

The adverse effects of the COVID-19 pandemic on our business, financial condition, results of operations, and liquidity have also had, and may continue to have, the effect of heightening many of the other risks described in the other risk factors below, as those risk factors are amended or supplemented by

subsequent Quarterly Reports on Form 10-Q and other reports and documents we file with the U.S. SEC after the date of this Annual Report on Form 10-K for the year ended December 31, 2020.

Risks Related to Our Business, Industry, and Operations

Our financial results are affected by volatile margins, which are dependent upon factors beyond our control, including the price of crude oil, corn, and other feedstocks and the market price at which we can sell our products.

Our financial results are affected by the relationship, or margin, between our product prices and the prices for crude oil, corn, and other feedstocks. Historically, refining and ethanol margins have been volatile, and we believe they will continue to be volatile in the future. Our cost to acquire feedstocks and the price at which we can ultimately sell products depend upon several factors beyond our control, including regional and global supply of and demand for crude oil, corn, other feedstocks, gasoline, diesel, other refined petroleum products, and renewable products. These in turn depend on, among other things, the availability and quantity of imports, the production levels of U.S. and international suppliers, levels of product inventories, productivity and growth (or the lack thereof) of U.S. and global economies, U.S. relationships with foreign governments, political affairs, and the extent of governmental regulation. The ability of the members of the Organization of Petroleum Exporting Countries (OPEC) to agree on and to maintain crude oil price and production controls has also had, and may continue to have, a significant impact on the market prices of crude oil and certain of our products.

Some of these factors can vary by region and may change quickly, adding to market volatility, while others may have longer-term effects. The longer-term effects of these and other factors on product margins are uncertain. We do not produce crude oil, corn, or all of our other feedstocks and must purchase all of the feedstocks we process. We generally purchase our feedstocks long before we process them and sell the resulting products. Price level changes during the period between purchasing feedstocks and selling the resulting products has had, and in the future could continue to have, a significant effect on our financial results. A decline in market prices, as was experienced during much of 2020, negatively impacted, and may continue to negatively impact, the carrying value of our inventories.

Economic turmoil and political unrest or hostilities, including the threat of future terrorist attacks, could affect the economies of the U.S. and other countries. Lower levels of economic activity could result in declines in energy consumption, including declines in the demand for and consumption of our products, which could cause our revenues and margins to decline and limit our future growth prospects.

Refining, renewable diesel, and ethanol margins also can be significantly impacted by additional conversion capacity through the expansion of existing facilities or the construction of new refineries or plants. Worldwide refining capacity expansions may result in refining production capability exceeding refined petroleum product demand, which would have an adverse effect on refining margins.

A significant portion of our profitability is derived from the ability to purchase and process crude oil feedstocks that historically have been cheaper than benchmark crude oils, such as Louisiana Light Sweet (LLS) and Brent crude oils. These crude oil feedstock differentials vary significantly depending on overall economic conditions and trends and conditions within the markets for crude oil and refined petroleum products, and have declined in certain periods, as was the case for much of 2020, and could again decline in the future. Previous declines have had, and any future declines would again have, a negative impact on our results of operations.

Legal, technological, and political developments and evolving market sentiment regarding fuel efficiency and low-carbon fuel standards may decrease the demand for our products and could adversely affect our performance.

Many state, provincial, and national governments across the world have imposed, and may impose in the future, increases in fuel economy standards, low-carbon fuel standards, restrictions on vehicles using petroleum-based fuel, and other policies or regulations (such as tax incentives or subsidies) aimed at steering the public towards less petroleum-dependent modes of transportation, which could reduce demand for our products. For example, in September 2020 the governor of California issued an executive order seeking to require that sales of all new passenger vehicles be zero-emission by 2035 and medium to heavy duty vehicles be zero-emission by 2045 where feasible. The executive order also requires state agencies to build out sufficient electric vehicle charging infrastructure. Other governmental authorities, such as the U.K. and Quebec, have also announced intentions to adopt similar restrictions with respect to the sale of new combustion-engine vehicles. A reduction in the demand for our products could also result from a shift by consumers to alternative fuel vehicles, whether as a result of technological or scientific advances, consumer or investor sentiment towards our products and their relationship to the environment, or legislation or regulation mandating or encouraging the use of alternative energy sources. It is not possible at this time to predict the ultimate form, timing, or extent of any such governmental, consumer, or investor actions. However, a reduction in the demand for our products as a result of any of the foregoing events could materially and adversely affect our business, financial condition, results of operations, and liquidity.

Developments with respect to low-carbon fuel policies and the market for alternative fuels may affect demand for our renewable fuels and could adversely affect our financial performance.

Low-carbon fuel policies, blending credits, and stricter fuel efficiency standards to help reach GHG emissions reduction targets help drive demand for our renewable fuels. Any changes to, a failure to enforce, or a discontinuation of any of these policies, goals, and initiatives could have a material adverse effect on our renewable fuels businesses. Similarly, new or changing technologies may be developed, consumers may shift to alternative fuels or alternative fuel vehicles (such as electric or hybrid vehicles) other than the renewable fuels we produce, and there may be new entrants into the renewable fuels production industry that could meet demand for lower-carbon transportation fuels and modes of transportation in a more efficient or less costly manner than our technologies and products, which could also have a material adverse effect on our renewable fuels businesses. For instance, several other refiners have made, or announced interest in, investments in renewable diesel projects. Should these projects develop, we would face competition from them for feedstocks and customers. While such developments are currently uncertain, a reduction in the demand for our renewable fuels or increased competition for feedstocks could adversely affect our financial performance.

Investor sentiment towards climate change, fossil fuels, and other ESG matters could adversely affect our business, cost of capital, and the price of our stock and other securities.

There have been efforts in recent years, which have intensified during the COVID-19 pandemic, aimed at the investment community, including investment advisors, sovereign wealth funds, public pension funds, universities, and other groups, to promote the divestment of securities of energy companies, as well as to pressure lenders and other financial services companies to limit or curtail activities with energy companies. As a result, some financial intermediaries, investors, and other capital markets participants have reduced or ceased lending to, or investing in, companies that operate in industries with higher perceived environmental exposure, such as the energy industry. For example, in December 2020, the state

of New York announced that it will be divesting the state's Common Retirement Fund from fossil fuels. If this or similar divestment efforts are continued, the price of our common stock or debt securities, and our ability to access capital markets or to otherwise obtain new investment or financing, may be negatively impacted.

Members of the investment community are also increasing their focus on ESG practices and disclosures, including practices and disclosures related to GHGs and climate change in the energy industry in particular, and diversity and inclusion initiatives and governance standards among companies more generally. As a result, we may face increasing pressure regarding our ESG practices and disclosures. Additionally, members of the investment community may screen companies such as ours for ESG performance before investing in our common stock or debt securities, or lending to us. Over the past few years there has also been an acceleration in investor demand for ESG investing opportunities, and many large institutional investors have committed to increasing the percentage of their portfolios that are allocated towards ESG-focused investments. As a result, there has been a proliferation of ESG-focused investment funds seeking ESG-oriented investment products.

If we are unable to meet the ESG standards or investment or lending criteria set by these investors and funds, we may lose investors, investors may allocate a portion of their capital away from us, our cost of capital may increase, the price of our common stock and debt securities may be negatively impacted, and our reputation may also be negatively affected.

Disruption of our ability to obtain crude oil, rendered and recycled materials, corn, and other feedstocks could adversely affect our operations.

A significant portion of our feedstock requirements is satisfied through supplies originating in the Middle East, Africa, Asia, North America, and South America. We are, therefore, subject to the political, geographic, and economic risks attendant to doing business with suppliers located in, and supplies originating from, these areas. If one or more of our supply contracts were terminated, or if political events disrupt our traditional feedstock supply, we believe that adequate alternative supplies would be available, but it is possible that we would be unable to find alternative sources of supply. If we are unable to obtain adequate volumes or are able to obtain such volumes only at unfavorable prices, our results of operations could be materially adversely affected, including from reduced sales volumes of products or reduced margins as a result of higher costs.

In addition, the U.S. government can prevent or restrict us from doing business in or with other countries. For instance, U.S. sanctions with respect to Iran and Venezuela currently limit the ability of U.S. companies to engage in oil transactions involving these countries. These restrictions, and those of other governments, could limit our ability to gain access to business opportunities in various countries. Actions by both the U.S. and other countries have affected our operations in the past and will continue to do so in the future.

While Darling, our joint venture partner in DGD, supplies some of DGD's feedstock at competitive pricing, DGD must still secure a significant amount of supply from other sources. Should Darling's supply be disrupted or should supply from other sources become limited or only available at unfavorable terms, DGD could be required to develop alternate sources of supply. While DGD does not believe feedstock supply is likely to be disrupted, such an event could have an adverse impact on DGD's, and therefore our, financial position, results of operations, and liquidity.

Our ethanol segment relies on corn sourced from local farmers and commercial elevators in the Mid-Continent region of the U.S. As a result, the feedstock supply of our ethanol segment is acutely exposed to the effects that weather and other environmental events occurring in that region, as well as applicable governmental policies such as farming subsidies, can have on crop production. Any reduction in crop production from these or similar events could reduce the supply of, or otherwise increase our costs to obtain, feedstocks for our ethanol segment.

We are subject to interruptions and increased costs as a result of our reliance on third-party transportation of crude oil and other feedstocks and the products that we manufacture.

We use the services of third parties to transport feedstocks to our refineries and plants and to transport the products we manufacture to market. If we experience prolonged interruptions of supply or increases in costs to deliver our products to market, or if the ability of the pipelines, vessels, trucks, or railroads to transport feedstocks or products is disrupted because of weather events, accidents, derailments, collisions, fires, explosions, governmental regulations, or third-party actions, it could have a material adverse effect on our financial position, results of operations, and liquidity.

Competitors that produce their own supply of feedstocks, own their own retail sites, have greater financial resources, or provide alternative energy sources may have a competitive advantage.

The refining and marketing industry is highly competitive with respect to both feedstock supply and refined petroleum product markets. We compete with many companies for available supplies of crude oil and other feedstocks and for retail sites for our refined petroleum products. We do not produce any of our crude oil feedstocks and we do not have a company-owned retail network. Many of our competitors, however, obtain a significant portion of their feedstocks from company-owned production and some have extensive retail sites. Such competitors are at times able to offset losses from refining operations with profits from producing or retailing operations, and they may be better positioned to withstand periods of depressed refining margins or feedstock shortages.

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

A significant interruption in one or more of our refineries or renewable diesel or ethanol plants could adversely affect our business.

Our refineries, renewable diesel plant, and ethanol plants are our principal operating assets. As a result, our operations could be subject to significant interruption if one or more of our refineries or plants were to experience a major accident or mechanical failure, be damaged by severe weather or other natural or man-made disaster, such as an act of terrorism, or otherwise be forced to shut down. If any refinery or plant were to experience an interruption in operations, earnings from the refinery or plant could be materially adversely affected (to the extent not recoverable through insurance) because of lost production and repair costs. Significant interruptions in our refining, renewable diesel, or ethanol systems could also lead to increased volatility in prices for crude oil, rendered and recycled materials, corn, and many of our products.

Large capital projects can take many years to complete, and market conditions could deteriorate over time, negatively impacting project returns.

We may engage in capital projects based on the forecasted project economics and level of return on the capital to be employed in the project. Large-scale projects take many years to complete, and market conditions can change from our forecast. As a result, we may be unable to fully realize our expected returns, which could negatively impact our financial condition, results of operations, and cash flows.

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

We conduct some of our operations through joint ventures in which we may share control over certain economic and business interests with our joint venture partners. We also conduct some of our operations through entities in which we have no ownership. Our joint venture partners may have economic, business or legal interests, or goals that are inconsistent with our goals and interests or may be unable to meet their obligations. For instance, while we operate the DGD Plant and perform certain day-to-day operating and management functions for DGD as an independent contractor, we do not have full control with respect to every aspect of DGD's business and certain large actions concerning DGD, including, among others, the acquisition or disposition of assets above a certain value threshold, making certain changes to DGD's business plan, raising debt or equity capital, DGD's distribution policy, and entering into particular transactions, which currently require certain approvals from Darling. Failure by us, or an entity in which we have a joint venture interest, to adequately manage the risks associated with joint ventures, and any differences in views among us and our joint venture partners, which could prevent or delay actions that are in the best interest of us or the joint venture, could have a material adverse effect on our, or our joint ventures', financial position, results of operations, and liquidity.

We may incur losses and additional costs as a result of our forward-contract activities and derivative transactions.

We currently use commodity derivative instruments, and we expect to continue their use in the future. If the instruments we use to hedge our exposure to various types of risk are not effective, we may incur losses. In addition, we may be required to incur additional costs in connection with future regulation of derivative instruments to the extent it is applicable to us.

Legal, Governmental, and Regulatory Risks

Compliance with and changes in environmental laws, including proposed climate change laws and regulations, and climate change litigation could adversely affect our performance.

The principal environmental risks associated with our operations are emissions into the air and releases into the soil, surface water, or groundwater. Our operations are subject to extensive environmental laws and regulations, including those relating to the discharge of materials into the environment, waste management, pollution prevention measures, GHG emissions, and characteristics and composition of fuels, including gasoline and diesel. Certain of these laws and regulations could impose obligations to conduct assessment or remediation efforts at our refineries and plants as well as at formerly owned properties or third-party sites where we have taken wastes for disposal or where our wastes have migrated. Environmental laws and regulations also may impose liability on us for the conduct of third parties, or for actions that complied with applicable requirements when taken, regardless of negligence or fault. If we violate or fail to comply with these laws and regulations, we could be fined or otherwise sanctioned.

Because environmental laws and regulations are becoming more stringent and new environmental laws and regulations are continuously being enacted or proposed, such as those relating to GHG emissions and climate change, the level of expenditures required for environmental matters could increase in the future. Shortly after taking office in January 2021, President Biden issued a series of executive orders designed to address climate change. President Biden has also signed an executive order requiring agencies to review environmental actions taken by the previous administration, and the current administration has issued a memorandum to departments and agencies to refrain from proposing or issuing rules until a departmental or agency head appointed or designated by the current administration has reviewed and approved the rule. President Biden's executive orders, as well as the U.S.'s reentry into the Paris Agreement as discussed below, may result in the development of additional regulations or changes to existing regulations.

Current and future legislative action and regulatory initiatives could result in changes to operating permits, material changes in operations, increased capital expenditures and operating costs, increased costs of the goods we sell, and decreased demand for our products that cannot be assessed with certainty at this time. We may be required to make expenditures to modify operations, discontinue use of certain process units, or install pollution control equipment that could materially and adversely affect our business, financial condition, results of operations, and liquidity.

For example, in 2015, the U.S., Canada, and the U.K. participated in the United Nations Conference on Climate Change, which led to the creation of the Paris Agreement. The Paris Agreement, which was signed by the U.S. in April 2016, requires countries to review and "represent a progression" in their intended nationally determined contributions (which set GHG emission reduction goals) every five years beginning in 2020. In November 2019, the previous administration served notice on the United Nations that the U.S. would withdraw from the Paris Agreement, which ultimately occurred in 2020. However, on January 20, 2021, President Biden signed an instrument that reverses this withdrawal, and the U.S. formally rejoined the Paris Agreement on February 19, 2021. The U.S.'s reentry into the Paris Agreement may result in the development of additional regulations or changes to existing regulations. Additionally, the Paris Agreement may affect our operations in Canada, the U.K., Ireland, and Latin America. Restrictions on emissions of methane or carbon dioxide that have been or may be imposed in various U.S. states, at the U.S. federal level, or in other countries could also adversely affect the oil and gas industry.

We could also face increased climate-related litigation with respect to our operations or products. Governmental and other entities in various U.S. states such as California and New York have filed lawsuits against coal, gas, oil, and petroleum companies. The lawsuits allege damages as a result of climate change, and the plaintiffs seek damages and abatement under various tort theories. Similar lawsuits may be filed in other jurisdictions. While we are currently not a party to any of these lawsuits, they present a high degree of uncertainty regarding the extent to which energy companies face an increased risk of liability stemming from climate change, which risk would also adversely impact the oil and gas industry.

Compliance with the U.S. Environmental Protection Agency (EPA) Renewable Fuel Standard (RFS) could adversely affect our performance.

The U.S. EPA has implemented the RFS pursuant to the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. The RFS program sets annual quotas for the quantity of renewable fuels that must be blended into transportation fuels consumed in the U.S. A Renewable Identification Number (RIN) is assigned to each gallon of renewable fuel produced in or imported into the U.S. As a producer of petroleum-based transportation fuels, we are obligated to blend renewable fuels

into the products we produce at a rate that is at least commensurate to the U.S. EPA's quota and, to the extent we do not, we must purchase RINs in the market to satisfy our obligation under the RFS program. The U.S. EPA missed its November 30, 2020, statutory deadline to set the 2021 renewable volume obligations (RVOs) establishing the volume of renewable fuels refiners must blend into their fuel mix in 2021 and, to date, has not issued a proposed rule for the 2021 RVO. While there are statutory targets still in place, the ultimate RVO for 2021 and the potential costs associated therewith remain uncertain until the RVO is set.

We are exposed to the volatility in the market price of RINs. We cannot predict the future prices of RINs. RINs prices are dependent upon a variety of factors, including U.S. EPA regulations, the availability of RINs for purchase, and levels of transportation fuels produced, which can vary significantly from quarter to quarter. The ultimate outcome of the 2021 RVO rule will also likely affect RIN prices. If sufficient RINs are unavailable for purchase, if we have to pay a significantly higher price for RINs, or if we are otherwise unable to meet the U.S. EPA's RFS mandates, our results of operations and cash flows could be adversely affected.

The current administration has also been critical of exemptions from the RFS mandates granted to small refineries during the previous administration. While litigation over the issue is currently before the U.S. Supreme Court, the U.S. EPA under the current administration may be less willing to grant such waivers going forward and may increase the RVO obligations in future years. To the extent fewer waivers are granted in the future or RVO obligations are increased, the demand for and the price of RINs would likely also increase, and our results of operations and cash flows could be adversely affected.

Any attempt by the U.S. government to withdraw from, re-enter, materially modify any existing international trade agreements, or enter into any new international trade agreements in the future could adversely affect our business, financial condition, and results of operations.

The previous administration questioned certain existing and proposed trade agreements. For example, the administration withdrew the U.S. from the Trans-Pacific Partnership. In addition, the previous administration implemented and proposed various trade tariffs, which have resulted in foreign governments responding with tariffs on U.S. goods.

Changes in U.S. social, political, regulatory, and economic conditions or in laws and policies governing foreign trade, manufacturing, development, and investment could adversely affect our business. For example, the imposition of tariffs or other trade barriers with other countries could affect our ability to obtain feedstocks from international sources, increase our costs, and reduce the competitiveness of our products.

While there is currently a lack of certainty around the likelihood, timing, and details of any such policies and reforms, if the current U.S. administration takes action to withdraw from, re-enter, or materially modify any existing international trade agreements, or to enter into any new international trade agreements in the future, our business, financial condition, and results of operations could be adversely affected.

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

We are subject to extensive tax liabilities imposed by multiple jurisdictions, including income taxes, indirect taxes (excise/duty, sales/use, gross receipts, and value-added taxes (VAT)), payroll taxes, franchise taxes, withholding taxes, and ad valorem taxes. New tax laws and regulations and changes in

existing tax laws and regulations are continuously being enacted or proposed that could result in increased expenditures for tax liabilities in the future. Many of these liabilities are subject to periodic audits by the respective taxing authority. Although we believe we have used reasonable interpretations and assumptions in calculating our tax liabilities, the final determination of these tax audits and any related proceedings cannot be predicted with certainty. Any adverse outcome of such tax audits or related proceedings could result in unforeseen tax-related liabilities that may, individually or in the aggregate, materially affect our cash tax liabilities, results of operations, and financial condition. Tax rates in the various jurisdictions in which we operate may change significantly as a result of political or economic factors beyond our control. It is also possible that future changes to tax laws (including tax treaties with any of the jurisdictions in which we operate) could impact our ability to realize the tax savings recorded to date. Additionally, our future effective tax rates could be adversely affected by changes in tax laws (including tax treaties) or their interpretations.

Changes in the method of determining the London Interbank Offered Rate (LIBOR) or the replacement of LIBOR with an alternative reference rate may adversely affect interest rates.

On July 27, 2017, the Financial Conduct Authority in the U.K. announced that it would phase out LIBOR as a benchmark by the end of 2021. It is unclear whether new methods of calculating LIBOR will be established such that it continues to exist after 2021, or whether different benchmark rates used to price indebtedness will develop. In the future, we may need to renegotiate our financial agreements, including, but not limited to, our \$4.0 billion revolving credit facility, or incur other indebtedness, and we may be required to select and use a replacement reference rate for certain other outstanding debt. The phase-out of LIBOR or the use of any replacement reference rate may negatively impact the terms of, and our ability to refinance, such indebtedness and could also adversely affect the interest rate payable on, and the liquidity and value of, such indebtedness. In addition, the overall financial market and the ability to raise future indebtedness in a cost effective manner may be disrupted as a result of the phase-out or replacement of LIBOR. Disruption in the financial market could have a material adverse effect on our financial position, results of operations, and liquidity.

Changes in the U.K.'s economic and other relationships with the European Union (EU) could adversely affect us.

In June 2016, the U.K. elected to withdraw from the EU in a national referendum (Brexit). The U.K. withdrew from the EU on January 31, 2020, consistent with the terms of the EU-UK Withdrawal Agreement, with a transition period that ended on December 31, 2020. On January 1, 2021, the U.K. left the EU Single Market and Customs Union as well as all EU policies and international agreements. As a result, the free movement of persons, goods, services, and capital between the U.K. and the EU ended, and the EU and the U.K. formed two separate markets and two distinct regulatory and legal spaces. On December 24, 2020, the European Commission reached a trade agreement with the U.K. on the terms of its future cooperation with the EU. The trade agreement offers U.K. and EU companies preferential access to each other's markets, ensuring imported goods will be free of tariffs and quotas (subject to rules of origin requirements). The ultimate impact of this trade agreement, and the broader economic and regulatory consequences of Brexit, however, are currently unknown, and it is possible that such effects and consequences could ultimately adversely impact our operations and financial performance.

Cyber Security and Privacy Related Risks

A significant interruption related to our information technology systems could adversely affect our business.

Our information technology systems and network infrastructure may be subject to unauthorized access or attack, which could result in (i) a loss of intellectual property, proprietary information, or employee, customer or vendor data; (ii) public disclosure of sensitive information; (iii) increased costs to prevent, respond to, or mitigate cybersecurity events, such as deploying additional personnel and protection technologies, training employees, and engaging third-party experts and consultants; (iv) systems interruption; (v) disruption of our business operations; (vi) remediation costs for repairs of system damage; (vii) reputational damage that adversely affects customer or investor confidence; and (viii) damage to our competitiveness, stock price, and long-term stockholder value. A breach could also originate from, or compromise, our customers' and vendors' or other third-party networks outside of our control. A breach may also result in legal claims or proceedings against us by our shareholders, employees, customers, vendors, and governmental authorities (U.S. and non-U.S.). There can be no assurance that our infrastructure protection technologies and disaster recovery plans can prevent a technology systems breach or systems failure, which could have a material adverse effect on our financial position or results of operations. Furthermore, the continuing and evolving threat of cyberattacks has resulted in increased regulatory focus on prevention. To the extent we face increased regulatory requirements, we may be required to expend significant additional resources to meet such requirements.

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

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

The GDPR applies to activities regarding personal data that may be conducted by us, directly or indirectly through vendors and subcontractors, from an establishment in the EU. As interpretation and enforcement of the GDPR evolves, it creates a range of new compliance obligations, which could cause us to incur additional costs. Failure to comply could result in significant penalties of up to a maximum of 4 percent of our global turnover that may materially adversely affect our business, reputation, results of operations, and cash flows.

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

The GDPR and CCPA, as well as other data privacy laws that may become applicable to our business, pose increasingly complex compliance challenges and potentially elevate our costs. Any failure by us to comply with these laws and regulations, including as a result of a security or privacy breach, could result in significant penalties and liabilities for us. Additionally, if we acquire a company that has violated or is not in compliance with applicable data protection laws, we may incur significant liabilities and penalties as a result.

General Risk Factors

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

Our ability to obtain credit and capital depends in large measure on capital markets and liquidity factors that we do not control. Our ability to access credit and capital markets may be restricted at a time when we would like, or need, to access those markets, which could have an impact on our flexibility to react to changing economic and business conditions. In addition, the cost and availability of debt and equity financing may be adversely impacted by unstable or illiquid market conditions. Protracted uncertainty and illiquidity in these markets also could have an adverse impact on our lenders, commodity hedging counterparties, or our customers, causing them to fail to meet their obligations to us. In addition, decreased returns on pension fund assets may also materially increase our pension funding requirements.

Our access to credit and capital markets also depends on the credit ratings assigned to our debt by independent credit rating agencies. We currently maintain investment-grade ratings by Standard & Poor's Ratings Services, Moody's Investors Service, and Fitch Ratings on our senior unsecured debt. Ratings from credit agencies are not recommendations to buy, sell, or hold our securities. Each rating should be evaluated independently of any other rating. We cannot provide assurance that any of our current ratings will remain in effect for any given period of time or that a rating will not be lowered or withdrawn entirely by a rating agency if, in its judgment, circumstances so warrant. Specifically, if ratings agencies were to downgrade our long-term rating, particularly below investment grade, our borrowing costs may increase, which could adversely affect our ability to attract potential investors and our funding sources could decrease. In addition, we may not be able to obtain favorable credit terms from our suppliers or they may require us to provide collateral, letters of credit, or other forms of security, which would increase our operating costs. As a result, a downgrade below investment grade in our credit ratings could have a material adverse impact on our financial position, results of operations, and liquidity.

From time to time, our cash needs may exceed our internally generated cash flow, and our business could be materially and adversely affected if we were unable to obtain necessary funds from financing activities. From time to time, we may need to supplement our cash generated from operations with proceeds from financing activities. We have existing revolving credit facilities, committed letter of credit facilities, and an accounts receivable sales facility to provide us with available financing to meet our ongoing cash needs. In addition, we rely on the counterparties to our derivative instruments to fund their obligations under such arrangements. Uncertainty and illiquidity in financial markets may materially impact the ability of the participating financial institutions and other counterparties to fund their commitments to us under our various financing facilities or our derivative instruments, which could have a material adverse effect on our financial position, results of operations, and liquidity.

Severe weather events may have an adverse effect on our assets and operations.

Severe weather events, such as storms, hurricanes, droughts, or floods, could have an adverse effect on our operations and could increase our costs. For instance, severe weather events can have an impact on crops production and reduce the supply of, or otherwise increase our costs to obtain, feedstocks for our ethanol and renewable diesel segments. If climate changes result in more intense or frequent severe weather events, the physical and disruptive effects could have a material adverse impact on our operations and assets.

Our business may be negatively affected by work stoppages, slowdowns, or strikes by our employees, as well as new labor legislation issued by regulators.

Certain workers at five of our U.S. refineries, as well as at each of our Canadian and U.K. refineries, are covered by collective bargaining or similar agreements, which generally have unique and independent expiration dates. To the extent we are in negotiations for labor agreements expiring in the future, there is no assurance an agreement will be reached without a strike, work stoppage, or other labor action. Any prolonged strike, work stoppage, or other labor action at our facilities or at facilities owned or operated by third parties that support our operations could have an adverse effect on our financial condition or results of operations. In addition, future federal, state, or foreign labor legislation could result in labor shortages and higher costs, especially during critical maintenance periods.

We are subject to operational risks and our insurance may not be sufficient to cover all potential losses arising from operating hazards. Failure by one or more insurers to honor their coverage commitments for an insured event could materially and adversely affect our financial position, results of operations, and liquidity.

Our operations are subject to various hazards common to the industry, including explosions, fires, toxic emissions, maritime hazards, and natural catastrophes. As protection against these hazards, we maintain insurance coverage against some, but not all, potential losses and liabilities. We may not be able to maintain or obtain insurance of the type and amount we desire at reasonable rates. As a result of market conditions, premiums and deductibles for certain of our insurance policies could increase substantially. In some instances, certain insurance could become unavailable or available only for reduced amounts of coverage. For example, coverage for hurricane damage is very limited, and coverage for terrorism risks includes very broad exclusions. 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 liquidity.

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. We can make no assurances that we will be able to obtain the full amount of our insurance coverage for insured events.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 3. LEGAL PROCEEDINGS

LITIGATION

We incorporate by reference into this Item our disclosures made in Part II, Item 8 of this report included in Note 1 of Notes to Consolidated Financial Statements under the caption “Legal Contingencies.”

ENVIRONMENTAL ENFORCEMENT MATTERS

While it is not possible to predict the outcome of the following environmental proceedings, 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. We are reporting these proceedings to comply with U.S. SEC regulations, which 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 have the potential to result in monetary sanctions of \$300,000 or more.

U.S. EPA (Fuels). In our Annual Report on Form 10-K for the year ended December 31, 2018, we reported that we had an outstanding Notice of Violation from the U.S. EPA related to violations from a 2015 Mobile Source Inspection. In the fourth quarter of 2020, we negotiated a final Consent Order with the U.S. EPA resolving the matter upon entry of the Consent Order on December 29, 2020.

U.S. EPA (Benicia Refinery). On December 11, 2020, the U.S. EPA issued a Notice of Potential Violations and Opportunity to Confer related to a series of inspections conducted by the U.S. EPA in 2019, arising out of the 2017 Pacific Gas and Electric Company power outage, and a 2019 emissions event. We are working with the U.S. EPA to resolve this matter.

Attorney General of the State of Texas (Texas AG) (Corpus Christi Asphalt Plant). In our Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, we reported that we had received a letter and draft Agreed Final Judgment from the Texas AG related to a contaminated water backflow incident that related to the Valero Corpus Christi Asphalt Plant. The draft Agreed Final Judgment assessed proposed penalties in the amount of \$1.3 million. We are working with the Texas AG to resolve this matter.

Texas AG (Port Arthur Refinery). In our Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, we reported that the Texas AG had filed suit against our Port Arthur Refinery in the 419th Judicial District Court of Travis County, Texas, Cause No. D-1-GN-19-004121, for alleged violations of the Clean Air Act seeking injunctive relief and penalties. We are working with the Texas AG to resolve this matter.

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**

Our common stock trades on the NYSE under the trading symbol “VLO.”

As of January 31, 2021, there were 4,982 holders of record of our common stock.

Dividends are considered quarterly by the board of directors, may be paid only when approved by the board, and will depend on our financial condition, results of operations, cash flows, prospects, industry conditions, capital requirements, and other factors and restrictions our board deems relevant. There can be no assurance that we will pay a dividend in the future at the rates we have paid historically, or at all.

The following table discloses purchases of shares of our common stock made by us or on our behalf during the fourth quarter of 2020.

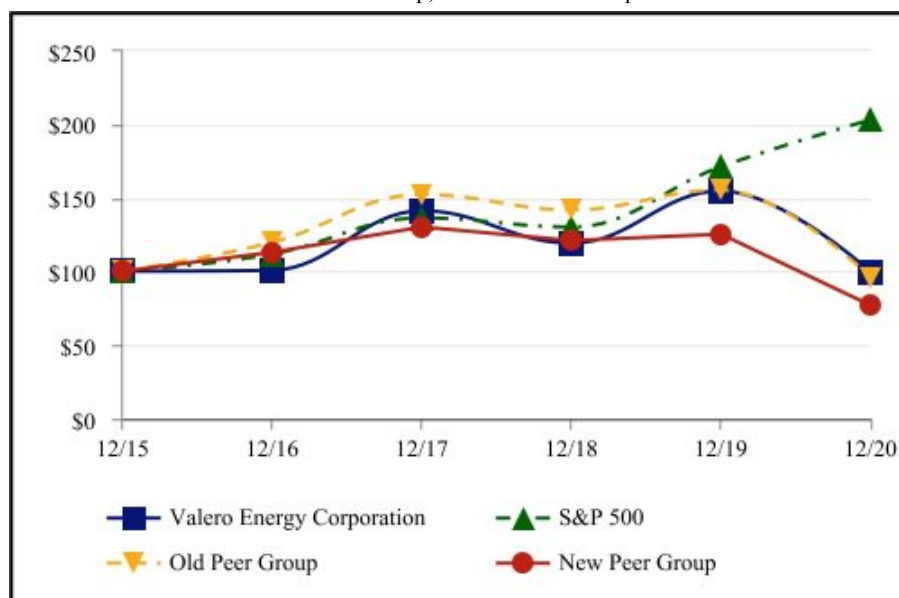
Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Not Purchased as Part of Publicly Announced Plans or Programs (a)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (b)
October 2020	13	\$ 39.91	13	—	\$1.4 billion
November 2020	191,256	\$ 43.32	191,256	—	\$1.4 billion
December 2020	11,551	\$ 55.40	11,551	—	\$1.4 billion
Total	202,820	\$ 44.01	202,820	—	\$1.4 billion

- (a) The shares reported in this column represent purchases settled in the fourth quarter of 2020 relating to (i) our purchases of shares in open-market transactions to meet our obligations under stock-based compensation plans and (ii) our purchases of shares from our employees and non-employee directors in connection with the exercise of stock options, the vesting of restricted stock, and other stock compensation transactions in accordance with the terms of our stock-based compensation plans.
- (b) On January 23, 2018, we announced that our board of directors authorized our purchase of up to \$2.5 billion of our outstanding common stock (the 2018 Program), with no expiration date. As of December 31, 2020, we had \$1.4 billion remaining available for purchase under the 2018 Program. We have not purchased any shares of our common stock under the 2018 Program since mid-March 2020, and we will evaluate the timing of repurchases when appropriate. We have no obligation to make purchases under the 2018 Program.

The performance graph on the following page is not “soliciting material,” is not deemed filed with the U.S. SEC, and is not to be incorporated by reference into any of Valero’s filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, as amended, respectively.

This performance graph and the related textual information are based on historical data and are not indicative of future performance. The following line graph compares the cumulative total return⁵ on an investment in our common stock against the cumulative total return of the S&P 500 Composite Index and an index of peers (that we selected) for the five-year period commencing December 31, 2015 and ending December 31, 2020. Our selected peer group comprises the following ten members: ConocoPhillips; CVR Energy, Inc.; Delek US Holdings, Inc.; the Energy Select Sector SPDR Fund; EOG Resources, Inc.; HollyFrontier Corporation; Marathon Petroleum Corporation; Occidental Petroleum Corporation; PBF Energy Inc.; and Phillips 66. Removed from the prior year’s peer group were BP p.l.c. and Royal Dutch Shell plc, while ConocoPhillips, EOG Resources, Inc., and Occidental Petroleum Corporation were added. Also added was the Energy Select Sector SPDR Fund index (XLE), which includes approximately 30 energy companies and serves as a proxy for stock price performance of the energy sector and includes companies with which we compete for capital. We believe that the revised peer group represents an improved group of companies for making head-to-head performance comparisons in a competitive operating environment that is primarily characterized by U.S.-based companies that have business models predominantly consisting of downstream refining operations, together with similarly sized energy companies that share operating similarities to us, and that are in adjacent segments of the oil and gas industry.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN⁵
 Among Valero Energy Corporation, the S&P 500 Index,
 Old Peer Group, and New Peer Group



	As of December 31,					
	2015	2016	2017	2018	2019	2020
Valero Common Stock	\$ 100.00	\$ 100.78	\$ 141.08	\$ 118.90	\$ 155.00	\$ 99.82
S&P 500	100.00	111.96	136.40	130.42	171.49	203.04
Old Peer Group	100.00	120.01	152.07	141.70	155.42	96.05
New Peer Group	100.00	113.28	130.35	121.31	125.22	76.79

⁵ Assumes that an investment in Valero common stock and each index was \$100 on December 31, 2015. “Cumulative total return” is based on share price appreciation plus reinvestment of dividends from December 31, 2015 through December 31, 2020.

ITEM 6. SELECTED FINANCIAL DATA

The selected financial data for the five-year period ended December 31, 2020 was derived from our audited financial statements. The following table should be read together with Item 7, “MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS” and with the historical financial statements and accompanying notes included in Item 8, “FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.”

The following summaries are in millions of dollars, except for per share amounts:

	Year Ended December 31,				
	2020 (a)	2019	2018	2017 (b)	2016 (c)
Revenues	\$ 64,912	\$ 108,324	\$ 117,033	\$ 93,980	\$ 75,659
Net income (loss)	(1,107)	2,784	3,353	4,156	2,417
Earnings (loss) per common share – assuming dilution	(3.50)	5.84	7.29	9.16	4.94
Dividends per common share	3.92	3.60	3.20	2.80	2.40
Total assets	51,774	53,864	50,155	50,158	46,173
Debt and finance lease obligations, less current portion	13,954	9,178	8,871	8,750	7,886

(a) Includes a charge of \$224 million related to the liquidation of last-in, first-out (LIFO) inventory layers.

(b) Includes the impact of the Tax Cuts and Jobs Act of 2017 that was enacted on December 22, 2017 and resulted in a net income tax benefit of \$1.9 billion.

(c) Includes a noncash LCM inventory valuation adjustment that resulted in a pre-tax benefit of \$747 million.

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 1A, “RISK FACTORS,” and Item 8, “FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA,” included in this report.

This discussion and analysis includes the years ended December 31, 2020 and 2019 and comparisons between such years. The discussions for the year ended December 31, 2018 and comparisons between the years ended December 31, 2019 and 2018 have been omitted from this Annual Report on Form 10-K for the year ended December 31, 2020, as such information can be found in “MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS” in Part II, Item 7 in our Annual Report on Form 10-K for the year ended December 31, 2019, which was filed on February 26, 2020.

CAUTIONARY STATEMENT FOR THE PURPOSE OF SAFE HARBOR PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This report, including without limitation our disclosures below under the heading “OVERVIEW AND OUTLOOK,” includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. You can identify our forward-looking statements by the words “anticipate,” “believe,” “expect,” “plan,” “intend,” “scheduled,” “estimate,” “project,” “projection,” “predict,” “budget,” “forecast,” “goal,” “guidance,” “target,” “could,” “would,” “should,” “will,” “may,” “strive,” “seek,” “potential,” “opportunity,” “aimed,” “considering,” “continue,” and similar expressions.

These forward-looking statements include, among other things, statements regarding:

- the effect, impact, potential duration, or other implications of the COVID-19 pandemic and global crude oil production levels, and any expectations we may have with respect thereto, including with respect to our operations and the production levels of our assets;
- future refining segment margins, including gasoline and distillate margins;
- future renewable diesel segment margins;
- future ethanol segment margins;
- expectations regarding feedstock costs, including crude oil differentials, and operating expenses;
- anticipated levels of crude oil and refined petroleum product inventories and storage capacity;
- our anticipated level of capital investments, including deferred turnaround and catalyst cost expenditures, capital expenditures for environmental and other purposes, and joint venture investments, the expected timing applicable to such capital investments and any related projects, and the effect of those capital investments on our results of operations;
- our anticipated level of cash distributions or contributions, such as our dividend payment rate and contributions to our qualified pension plans and other postretirement benefit plans;
- anticipated trends in the supply of and demand for crude oil and other feedstocks and refined petroleum products, renewable diesel, and ethanol and corn related co-products in the regions where we operate, as well as globally;
- expectations regarding environmental, tax, and other regulatory initiatives; and
- the effect of general economic and other conditions on refining, renewable diesel, and ethanol industry fundamentals.

We based our forward-looking statements on our current expectations, estimates, and projections about ourselves, our industry, and the global economy and financial markets generally. We caution that these statements are not guarantees of future performance or results and involve risks, uncertainties, and assumptions that we cannot predict. In addition, we based many of these forward-looking statements on assumptions about future events that may prove to be inaccurate. Accordingly, actual results may differ materially from the future performance or results that we have expressed or forecast in the forward-looking statements. Differences between actual results and any future performance or results suggested in these forward-looking statements could result from a variety of factors, including the following:

- demand for, and supplies of, refined petroleum products (such as gasoline, diesel, jet fuel, and petrochemicals), renewable diesel, and ethanol and corn related co-products;
- demand for, and supplies of, crude oil and other feedstocks;
- the effects of public health threats, pandemics, and epidemics, such as the COVID-19 pandemic, and the adverse impacts thereof on our business, financial condition, results of operations, and liquidity, including, but not limited to, our growth, operating costs, supply chain, labor availability, logistical capabilities, customer demand for our products, and industry demand generally, margins, production and throughput capacity, utilization, inventory value, cash position, taxes, the price of our securities and trading markets with respect thereto, our ability to access capital markets, and the global economy and financial markets generally;
- acts of terrorism aimed at either our refineries and plants or third-party facilities that could impair our ability to produce or transport refined petroleum products, renewable diesel, ethanol, or corn related co-products, or to receive feedstocks;
- political and economic conditions in nations that produce crude oil or other feedstocks or consume refined petroleum products, renewable diesel, ethanol or corn related co-products;
- the ability of the members of OPEC to agree on and to maintain crude oil price and production controls;
- the level of consumer demand, including seasonal fluctuations;
- refinery, renewable diesel plant or ethanol plant overcapacity or undercapacity;
- our ability to successfully integrate any acquired businesses into our operations;
- the actions taken by competitors, including both pricing and adjustments to refining capacity or renewable fuels production in response to market conditions;
- the level of competitors' imports into markets that we supply;
- accidents, unscheduled shutdowns, weather events, civil unrest, political events, terrorism, cyberattacks, or other catastrophes or disruptions affecting our operations, production facilities, machinery, pipelines and other logistics assets, equipment, or information systems, or any of the foregoing of our suppliers, customers, or third-party service providers;
- changes in the cost or availability of transportation or storage capacity for feedstocks and our products;
- the price, availability, and acceptance of alternative fuels and alternative-fuel vehicles, as well as sentiment and perceptions with respect to GHG emissions more generally;
- the levels of government subsidies for, and mandates or other policies with respect to, alternative fuels, alternative-fuel vehicles, and other low-carbon technologies;
- the volatility in the market price of biofuel credits (primarily RINs needed to comply with the RFS) and GHG emission credits needed to comply with the requirements of various GHG emission programs;
- delay of, cancellation of, or failure to implement planned capital projects and realize the various assumptions and benefits projected for such projects or cost overruns in constructing such planned capital projects;

- earthquakes, hurricanes, tornadoes, and irregular weather, which can unforeseeably affect the price or availability of natural gas, crude oil, rendered and recycled materials, corn, and other feedstocks, refined petroleum products, renewable diesel, and ethanol;
- rulings, judgments, or settlements in litigation or other legal or regulatory matters, including unexpected environmental remediation costs, in excess of any reserves or insurance coverage;
- legislative or regulatory action, including the introduction or enactment of legislation or rulemakings by governmental authorities, including tariffs and tax and environmental regulations, such as those implemented under the California cap-and-trade system and similar programs, and the U.S. EPA's or other governmental regulation of GHGs, which may adversely affect our business or operations;
- changes in the credit ratings assigned to our debt securities and trade credit;
- changes in currency exchange rates, including the value of the Canadian dollar, the pound sterling, the euro, the Mexican peso, and the Peruvian sol relative to the U.S. dollar;
- the adequacy of capital resources and liquidity, including availability, timing, and amounts of cash flow or our ability to borrow;
- overall economic conditions, including the stability and liquidity of financial markets; and
- other factors generally described in the "RISK FACTORS" section included in Item 1A, "RISK FACTORS" in this report.

Any one of these factors, or a combination of these factors, could materially affect our future results of operations and whether any forward-looking statements ultimately prove to be accurate. Our forward-looking statements are not guarantees of future performance, and actual results and future performance may differ materially from those suggested in any forward-looking statements. We do not intend to update these statements unless we are required by the securities laws to do so.

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. We undertake no obligation to publicly release any revisions to any such forward-looking statements that may be made to reflect events or circumstances after the date of this report or to reflect the occurrence of unanticipated events.

NON-GAAP FINANCIAL MEASURES

The discussions in "OVERVIEW AND OUTLOOK," "RESULTS OF OPERATIONS," and "LIQUIDITY AND CAPITAL RESOURCES" below include references to financial measures that are not defined under U.S. generally accepted accounting principles (GAAP). These non-GAAP financial measures include adjusted operating income (loss) (including adjusted operating income (loss) for each of our reportable segments, as applicable); refining, renewable diesel, and ethanol segment margin; and capital investments attributable to Valero. We have included these non-GAAP financial measures to help facilitate the comparison of operating results between years and to help assess our cash flows. See the tables in note (f) beginning on page 46 for reconciliations of adjusted operating income (loss) (including adjusted operating income (loss) for each of our reportable segments, as applicable) and refining, renewable diesel, and ethanol segment margin to their most directly comparable U.S. GAAP financial measures. Also in note (f), we disclose the reasons why we believe our use of such non-GAAP financial measures provides useful information. See the table on page 53 for a reconciliation of capital investments attributable to Valero to its most directly comparable U.S. GAAP financial measure. Beginning on page 52, we disclose the reasons why we believe our use of this non-GAAP financial measure provides useful information.

OVERVIEW AND OUTLOOK

Overview

Business Operations Update

The outbreak of COVID-19 and its development into a pandemic in March 2020 has resulted in significant economic disruption globally, including in North America, Europe, and Latin America, the primary geographic areas where we operate. In March, governmental authorities around the world took actions, such as stay-at-home orders and other social distancing measures, to slow the spread of COVID-19 that restricted travel, public gatherings, and the overall level of individual movement and in-person interaction across the globe. These actions significantly reduced global economic activity and negatively impacted many businesses, including our business. Airlines have dramatically reduced flights and motor vehicle usage has significantly declined, in each case relative to typical pre-pandemic levels. As a result, in the first half of 2020, there was a decline in the demand for, and thus also the market prices of, most of the transportation fuels that we produce and sell. There was also a decline in the global demand for crude oil, the primary feedstock for our refined products, resulting in a decline in crude oil prices and production levels. While the production levels of all types of crude oils have declined, sour crude oil production has declined significantly and by more than production levels for sweet crude oils. This has reduced the price advantage of sour crude oils relative to sweet crude oils, which has exacerbated the negative impact of lower product prices on our refining margin.^{6,7}

Beginning in the latter part of the second quarter, certain governmental authorities in the U.S. and other countries across the world, particularly those in our U.S. Gulf Coast and U.S. Mid-Continent regions, began lifting many of the restrictions put in place to slow the spread of COVID-19, while governmental authorities in our U.S. West Coast and North Atlantic regions began lifting restrictions on a more moderate basis during the third quarter. This resulted in an increase in the level of individual movement and travel and, in turn, an increase in the demand and market prices for most of our products relative to what we experienced during the early months of the pandemic. However, in the second half of 2020, many locations where restrictions were lifted, and others where the restrictions were only more moderately lifted (such as California in our U.S. West Coast region, and New York, Canada, and the U.K. in our North Atlantic region), experienced a resurgence in the spread of COVID-19, which prompted many governmental authorities to reimpose certain restrictions. In December 2020, the U.S. FDA and Canadian and U.K. regulators each granted emergency-use authorization for multiple COVID-19 vaccines to be used as immunization against the COVID-19 virus. Although these vaccines may be seen as a key factor in helping to restore public confidence, and thus stimulate and increase economic activity, potentially to pre-pandemic levels, they may not be distributed widely on a timely basis and they may not be effective against new variants of the virus. Based on these and other circumstances that cannot be predicted, the broader implications of the pandemic on our results of operations and financial position remain uncertain.

As previously noted, the decrease in the demand for transportation fuels has resulted in a significant decrease in the price of refined petroleum products manufactured by our refining segment. For example, the price of gasoline⁸ in the U.S. Gulf Coast region where eight of our 15 refineries are located was \$68.82 per barrel at the beginning of 2020, fell to \$17.65 per barrel at the end of March (a 74 percent decline), and partially recovered to \$57.63 per barrel by the end of December (a 16 percent decline over

⁶ See page 46 for our definition of refining margin and why we believe it is an important financial and operating measure.

⁷ Sour crude oils typically sell at a discount to the price of benchmark sweet crude oils, which set the price of most refined products. Therefore, lower prices for sour crude oils that we process have a favorable impact on our refining margin.

⁸ Gasoline prices quoted represent the price of U.S. Gulf Coast conventional blendstock of oxygenate blending gasoline.

the twelve-month period). Another example is the price of diesel⁹ in the U.S. Gulf Coast region, which was \$81.71 per barrel at the beginning of 2020, fell to \$39.18 per barrel at the end of March (a 52 percent decline), and partially recovered to \$60.20 per barrel by the end of December (a 26 percent decline over the twelve-month period). On February 22, 2021, the prices of gasoline and diesel were \$76.62 per barrel and \$76.84 per barrel, respectively.

Demand for renewable diesel has not declined due to continued demand for this low-carbon transportation fuel despite the current economic environment; therefore, our renewable diesel segment has not been impacted as were our refining and ethanol segments.

The price of ethanol manufactured by our ethanol segment has also decreased due to a decline in demand. Because ethanol is primarily blended into gasoline, ethanol demand declined along with the decline in the demand for gasoline.

Prices for the products we sell and the feedstocks we purchase impact our revenues, cost of sales, operating income, and liquidity. In addition, a decline in the market prices of products and feedstocks below their carrying values in our inventory results in a writedown in the value of our inventories, and a subsequent recovery in market prices results in a write-up in the value of our inventories, not to exceed their previous carrying values. These inventory valuation adjustments are referred to as LCM inventory valuation adjustments and are described in Note 5 of Notes to Consolidated Financial Statements. We wrote down the value of our inventories by \$2.5 billion in the first quarter of 2020 due to the significant decline in market prices at that time, but as market prices improved, the writedown was fully reversed by the end of the third quarter.

For the year ended December 31, 2020, we generated an operating loss of \$1.6 billion. Our operating results for the year ended December 31, 2020, including operating results by segment, are described in the summary below, and detailed descriptions can be found under “RESULTS OF OPERATIONS” on pages 37 through 49.

Our cash and cash equivalents increased by \$730 million during 2020, from \$2.6 billion as of December 31, 2019 to \$3.3 billion as of December 31, 2020. We invested \$2.4 billion in our business and returned \$1.8 billion to our stockholders primarily through dividend payments. These uses of cash were offset by proceeds from two public debt offerings totaling \$4.0 billion before deducting the underwriting discounts and debt issuance costs as described in Note 10 of Notes to Consolidated Financial Statements. In addition, our operations generated net cash of \$948 million, which was driven by a decrease in inventory on hand. We had \$9.0 billion of liquidity¹⁰ as of December 31, 2020. A summary of our cash flows is presented on page 50, and a description of our cash flows and other matters impacting our liquidity and capital resources, including measures we have taken to address the impacts of the COVID-19 pandemic on our liquidity, can be found under “LIQUIDITY AND CAPITAL RESOURCES” on pages 49 through 55.

We have responded in multiple ways to the impacts from the COVID-19 pandemic on our business, and we will strive to continue to respond to these impacts. During the early months of the pandemic, we reduced the amount of crude oil processed at most of our refineries in response to the decreased demand for our products, we temporarily idled various gasoline-making units at certain of our refineries to further limit gasoline production, and we took measures to reduce jet fuel production. We also temporarily idled

⁹ Diesel prices quoted represent the price of U.S. Gulf Coast ultra-low sulfur diesel.

¹⁰ See the components of our liquidity as of December 31, 2020 in the table on page 50 under “LIQUIDITY AND CAPITAL RESOURCES—*Our Liquidity*.”

eight of our ethanol plants and reduced production at our other ethanol plants, in each case in order to address the decreased demand for ethanol. We have since increased the production of most of our products to align with increasing demand, and we restarted the gasoline-making units and most of the ethanol plants that had been temporarily idled. Demand for our products taken as a whole, however, has not returned to pre-pandemic levels, and as of December 31, 2020, our refineries and plants are operating to meet current product demand. In addition to these measures and the issuances of an aggregate of \$4.0 billion of debt previously noted, we have addressed our liquidity as outlined below:

- We deferred projects representing approximately \$500 million of capital investments that we had expected to make in 2020 related to our refining and ethanol segments.
- We deferred income and indirect (e.g., VAT and motor fuel taxes) tax payments of approximately \$440 million due in the first and second quarters of 2020. These deferrals were provided to taxpayers under new legislation, such as the Coronavirus Aid, Relief, and Economic Security (CARES) Act in the U.S., and by various taxing authorities under existing legislation. As of December 31, 2020, we had approximately \$250 million of deferred tax payments. Of the \$250 million, approximately 70 percent will be paid in 2021 and 30 percent in 2022.
- We have not purchased any shares of our common stock under our stock purchase program since mid-March 2020, and we will evaluate the timing of repurchases when appropriate. We have no obligation to make purchases under our stock purchase program.
- We entered into a 364-day Revolving Credit Facility on April 13, 2020 with an aggregate principal amount of up to \$875 million as described in Note 10 of Notes to Consolidated Financial Statements. As of December 31, 2020 and February 22, 2021, we had no outstanding borrowings under this facility.
- We extended the maturity date of our accounts receivable sales facility to July 2021 and decreased the facility amount from \$1.3 billion to \$1.0 billion as described in Note 10 of Notes to Consolidated Financial Statements. As of December 31, 2020 and February 22, 2021, we had no outstanding borrowings under this facility.

Many uncertainties remain with respect to the COVID-19 pandemic, including its resulting economic effects, and we are unable to predict the ultimate economic impacts from the pandemic on our business and how quickly national economies can recover once the pandemic subsides, the timing or effectiveness of vaccine distributions, or whether any recovery will ultimately experience a reversal or other setbacks. However, the adverse impacts of the economic effects on our company have been and will likely continue to be significant. We believe we have proactively addressed many of the known impacts of the pandemic to the extent possible and we will strive to continue to do so, but there can be no assurance that these or other measures will be fully effective.

Results for the Year Ended December 31, 2020

For 2020, we reported a net loss attributable to Valero stockholders of \$1.4 billion compared to net income attributable to Valero stockholders of \$2.4 billion for 2019, which represents a decrease of \$3.8 billion. The decrease was primarily due to lower operating income of \$5.4 billion, partially offset by a \$1.6 billion decrease in income taxes. The decrease in operating income included a \$224 million charge for the impact of a liquidation of LIFO inventory layers, which is described in Note 5 of Notes to Consolidated Financial Statements and in note (a) on page 44.

While our operating income decreased by \$5.4 billion in 2020 compared to 2019, adjusted operating income decreased by \$5.0 billion. Adjusted operating income excludes the LIFO liquidation adjustment and other adjustments to operating income reflected in the table in note (f) on page 49.

The \$5.0 billion decrease in adjusted operating income was primarily due to the following:

- *Refining segment.* Refining segment adjusted operating income decreased by \$5.1 billion primarily due to decreases in gasoline and distillate margins, lower throughput volumes, and the higher cost of biofuel credits, partially offset by higher margins on other products and lower operating expenses (excluding depreciation and amortization expense). This is more fully described on pages 41 and 42.
- *Renewable diesel segment.* Renewable diesel segment adjusted operating income increased by \$62 million primarily due to a favorable impact from commodity derivative instruments associated with our price risk management activities. This is more fully described on page 43.
- *Ethanol segment.* Ethanol segment adjusted operating income decreased by \$40 million primarily due to lower ethanol prices and production volumes, partially offset by higher prices on corn related co-products, lower corn prices, and lower operating expenses (excluding depreciation and amortization expense). This is more fully described on pages 43 and 44.

Outlook

As previously discussed, many uncertainties remain with respect to the COVID-19 pandemic, and while it is difficult to predict the ultimate economic impacts that the pandemic will have on us and how quickly we can recover once the pandemic subsides, we have noted several factors below that have impacted or may impact our results of operations during the first quarter of 2021.

- Gasoline, jet fuel, and diesel prices are expected to improve as industry-wide excess inventory levels continue to draw toward historical levels and product demand recovers.
- Sour crude oil discounts are not expected to improve until OPEC production is increased in response to any growth in global oil demand.
- Renewable diesel margins are expected to remain consistent with current levels.
- Ethanol margins are expected to decline.

As a result of Brexit in June 2016, the U.K. withdrew from the EU on January 31, 2020 consistent with the terms of the EU-UK Withdrawal Agreement. In late December 2020, the European Commission reached a trade agreement with the U.K. on the terms of its future cooperation with the EU. The trade agreement offers U.K. and EU companies preferential access to each other's markets, ensuring imported goods will be free of tariffs and quotas (subject to rules of origin requirements). Although the ultimate impact of this trade agreement is currently unknown, we do not anticipate any material adverse effect on our operations in the U.K.

In mid-February 2021, the U.S. Gulf Coast and U.S. Mid-Continent regions experienced a severe winter storm that disrupted the operation of industrial facilities like refineries, plants, and logistical assets, including ours located in those regions. Most facilities experienced curtailments or outages of various utilities and other services necessary for such facilities to remain operational. All of our facilities in those

regions were impacted to some extent by the severe cold and/or supply and utility disruptions. We are in the process of returning to normal operations and we are currently unable to estimate the impact this event will have on our results of operations.

RESULTS OF OPERATIONS

The following tables, including the reconciliations of non-GAAP financial measures to their most directly comparable U.S. GAAP financial measures in note (f) beginning on page 46, highlight our results of operations, our operating performance, and market reference prices that directly impact our operations.

Financial Highlights by Segment and Total Company (millions of dollars)

	Year Ended December 31, 2020				
	Refining	Renewable Diesel	Ethanol	Corporate and Eliminations	Total
Revenues:					
Revenues from external customers	\$ 60,840	\$ 1,055	\$ 3,017	\$ —	\$ 64,912
Intersegment revenues	8	212	226	(446)	—
Total revenues	60,848	1,267	3,243	(446)	64,912
Cost of sales:					
Cost of materials and other (a) (b)	56,093	500	2,784	(444)	58,933
LCM inventory valuation adjustment (c)	(19)	—	—	—	(19)
Operating expenses (excluding depreciation and amortization expense reflected below)	3,944	85	406	—	4,435
Depreciation and amortization expense (d)	2,138	44	121	—	2,303
Total cost of sales	62,156	629	3,311	(444)	65,652
Other operating expenses	34	—	1	—	35
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	756	756
Depreciation and amortization expense	—	—	—	48	48
Operating income (loss) by segment	\$ (1,342)	\$ 638	\$ (69)	\$ (806)	(1,579)
Other income, net					132
Interest and debt expense, net of capitalized interest					(563)
Loss before income tax benefit					(2,010)
Income tax benefit					(903)
Net loss					(1,107)
Less: Net income attributable to noncontrolling interests (b)					314
Net loss attributable to Valero Energy Corporation stockholders					\$ (1,421)

See note references on pages 44 through 49.

Financial Highlights by Segment and Total Company (continued)
(millions of dollars)

	Year Ended December 31, 2019				
	Refining	Renewable Diesel	Ethanol	Corporate and Eliminations	Total
Revenues:					
Revenues from external customers	\$ 103,746	\$ 970	\$ 3,606	\$ 2	\$ 108,324
Intersegment revenues	18	247	231	(496)	—
Total revenues	103,764	1,217	3,837	(494)	108,324
Cost of sales:					
Cost of materials and other (b)	93,371	360	3,239	(494)	96,476
Operating expenses (excluding depreciation and amortization expense reflected below)	4,289	75	504	—	4,868
Depreciation and amortization expense	2,062	50	90	—	2,202
Total cost of sales	99,722	485	3,833	(494)	103,546
Other operating expenses	20	—	1	—	21
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	868	868
Depreciation and amortization expense	—	—	—	53	53
Operating income by segment	<u>\$ 4,022</u>	<u>\$ 732</u>	<u>\$ 3</u>	<u>\$ (921)</u>	3,836
Other income, net (e)					104
Interest and debt expense, net of capitalized interest					(454)
Income before income tax expense					3,486
Income tax expense					702
Net income					2,784
Less: Net income attributable to noncontrolling interests (b)					362
Net income attributable to Valero Energy Corporation stockholders					<u>\$ 2,422</u>

See note references on pages 44 through 49.

Average Market Reference Prices and Differentials

	Year Ended December 31,	
	2020	2019
Refining		
Feedstocks (dollars per barrel)		
Brent crude oil	\$ 43.15	\$ 64.18
Brent less West Texas Intermediate (WTI) crude oil	3.84	7.15
Brent less Alaska North Slope (ANS) crude oil	0.82	(0.86)
Brent less LLS crude oil	1.91	1.47
Brent less Argus Sour Crude Index (ASCI) crude oil	3.26	3.56
Brent less Maya crude oil	6.89	6.57
LLS crude oil	41.24	62.71
LLS less ASCI crude oil	1.35	2.09
LLS less Maya crude oil	4.98	5.10
WTI crude oil	39.31	57.03
Natural gas (dollars per million British Thermal Units (MMBtu))		
	2.00	2.47
Products (dollars per barrel)		
U.S. Gulf Coast:		
Conventional Blendstock of Oxygenate Blending (CBOB) gasoline less Brent	2.97	4.37
Ultra-low-sulfur (ULS) diesel less Brent	7.11	14.90
Propylene less Brent	(12.12)	(22.31)
CBOB gasoline less LLS	4.88	5.84
ULS diesel less LLS	9.02	16.37
Propylene less LLS	(10.22)	(20.84)
U.S. Mid-Continent:		
CBOB gasoline less WTI	6.96	13.62
ULS diesel less WTI	12.11	22.77
North Atlantic:		
CBOB gasoline less Brent	5.50	7.20
ULS diesel less Brent	9.17	17.22
U.S. West Coast:		
CARBOB 87 gasoline less ANS	10.33	16.28
CARB diesel less ANS	12.42	19.30
CARBOB 87 gasoline less WTI	13.36	24.29
CARB diesel less WTI	15.44	27.31

Average Market Reference Prices and Differentials, (continued)

	Year Ended December 31,	
	2020	2019
Renewable diesel		
New York Mercantile Exchange ULS diesel (dollars per gallon)	\$ 1.25	\$ 1.94
Biodiesel RIN (dollars per RIN)	0.64	0.48
California Low-Carbon Fuel Standard (dollars per metric ton)	200.12	196.82
Chicago Board of Trade (CBOT) soybean oil (dollars per pound)	0.32	0.29
Ethanol		
CBOT corn (dollars per bushel)	3.64	3.84
New York Harbor (NYH) ethanol (dollars per gallon)	1.36	1.53

2020 Compared to 2019
Total Company, Corporate, and Other

The following table includes selected financial data for the total company, corporate, and other for 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 37 and 38, unless otherwise noted.

	Year Ended December 31,		
	2020	2019	Change
Revenues	\$ 64,912	\$ 108,324	\$ (43,412)
Cost of sales (see notes (a) through (c) beginning on page 44)	65,652	103,546	(37,894)
General and administrative expenses (excluding depreciation and amortization expense)	756	868	(112)
Operating income (loss)	(1,579)	3,836	(5,415)
Adjusted operating income (loss) (see note (f) on page 49)	(1,309)	3,699	(5,008)
Interest and debt expense, net of capitalized interest	(563)	(454)	(109)
Income tax expense (benefit)	(903)	702	(1,605)
Net income attributable to noncontrolling interests (see note (b) on page 44)	314	362	(48)

Revenues decreased by \$43.4 billion in 2020 compared to 2019 primarily due to decreases in refined petroleum product prices associated with sales made by our refining segment. The decrease in revenues was partially offset by a decrease in cost of sales of \$37.9 billion and a decrease in general and administrative expenses (excluding depreciation and amortization expense) of \$112 million, which resulted in a \$5.4 billion decrease in operating income, from \$3.8 billion of operating income in 2019 to an operating loss of \$1.6 billion in 2020. The decrease in cost of sales was primarily due to decreases in crude oil and other feedstock costs, partially offset by the \$224 million LIFO liquidation adjustment, which is described in note (a) on page 44.

Adjusted operating income decreased by \$5.0 billion, from \$3.7 billion of adjusted operating income in 2019 to an adjusted operating loss of \$1.3 billion in 2020. The \$5.0 billion decrease includes a \$112 million decrease in general and administrative expenses (excluding depreciation and amortization

expense) associated with our corporate activities, and this decrease is discussed below. The remaining components of the decrease in adjusted operating income are discussed by segment in the segment analysis that follows.

General and administrative expenses (excluding depreciation and amortization expense) decreased by \$112 million in 2020 compared to 2019 primarily due to a decrease in employee incentive compensation expenses of \$37 million, a decrease in charitable contributions of \$20 million, lower advertising expenses of \$18 million, and lower taxes other than income taxes of \$16 million, as well as the effect from transaction costs of \$7 million associated with the Merger Transaction with VLP in 2019.

“Interest and debt expense, net of capitalized interest” increased by \$109 million in 2020 compared to 2019 primarily due to interest expense associated with public debt offerings in 2020 and finance leases that commenced in the latter part of 2019 and the first nine months of 2020. See Notes 6 and 10 in Notes to Consolidated Financial Statements for additional details.

Income tax expense decreased by \$1.6 billion in 2020 compared to 2019 primarily as a result of lower income before income tax expense. Our effective tax rate was 45 percent in 2020 compared to 20 percent in 2019. The effective tax rate for 2020 was impacted by a U.S. federal tax net operating loss (NOL) carried back to 2015 when the U.S. federal statutory rate was 35 percent, as described in Note 16 of Notes to Consolidated Financial Statements.

Net income attributable to noncontrolling interests decreased by \$48 million in 2020 compared to 2019 primarily due to lower earnings associated with DGD. The decrease in DGD’s earnings is primarily due to the effect of a \$156 million benefit for the 2018 blender’s tax credit recognized in 2019, of which 50 percent is attributable to the holder of the noncontrolling interest, as described in note (b) on page 44.

Refining Segment Results

The following table includes selected financial and operating data of our refining segment for 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 37 and 38, respectively, unless otherwise noted.

	Year Ended December 31,		
	2020	2019	Change
Operating income (loss)	\$ (1,342)	\$ 4,022	\$ (5,364)
Adjusted operating income (loss) (see note (f) on page 48)	(1,105)	4,040	(5,145)
Refining margin (see note (f) on page 46)	\$ 4,977	\$ 10,391	\$ (5,414)
Operating expenses (excluding depreciation and amortization expense reflected below)	3,944	4,289	(345)
Depreciation and amortization expense	2,138	2,062	76
Throughput volumes (thousand BPD) (see note (g) on page 49)	2,555	2,952	(397)

Refining segment operating income decreased by \$5.4 billion in 2020; however, refining segment adjusted operating income, which excludes the adjustments in the table in note (f) on page 48, decreased

by \$5.1 billion in 2020 compared to 2019. The components of this decrease, along with the reasons for the changes in those components, are outlined below.

- Refining segment margin decreased by \$5.4 billion in 2020 compared to 2019.

Refining segment margin is primarily affected by the prices of the refined petroleum products that we sell and the cost of crude oil and other feedstocks that we process. The table on page 39 reflects market reference prices and differentials that we believe had a material impact on the change in our refining segment margin in 2020 compared to 2019.

The decrease in refining segment margin was primarily due to the following:

- A decrease in distillate (primarily diesel) margins had an unfavorable impact of approximately \$3.4 billion.
 - A decrease in gasoline margins had an unfavorable impact of approximately \$1.7 billion.
 - A decrease in throughput volumes of 397,000 BPD had an unfavorable impact of \$773 million. As noted in “OVERVIEW AND OUTLOOK—*Overview*—Business Operations Update” on pages 33 through 35, as a result of the economic disruption from the COVID-19 pandemic, we reduced the amount of crude oil processed at our refineries and limited the production of gasoline and jet fuel at certain of our refineries during the early months of the pandemic. While we have since increased the production of most of our products and restarted the gasoline-making units that we had temporarily idled at certain of our refineries in order to align with increasing demand for most of our products, we expect to continue to operate most of our refineries at reduced rates.
 - An increase in the cost of biofuel credits (primarily RINs in the U.S.) had an unfavorable impact of \$330 million. See Note 21 of Notes to Consolidated Financial Statements for additional information on our government and regulatory compliance programs.
 - Higher margins on other products had a favorable impact of approximately \$1.1 billion.
- Refining segment operating expenses (excluding depreciation and amortization expense) decreased by \$345 million primarily due to lower natural gas and electricity costs of \$161 million, lower chemical and catalyst costs of \$78 million, lower maintenance expenses of \$40 million, and lower employee incentive compensation costs of \$28 million. The decrease in operating expenses was primarily due to lower production.
 - Refining segment depreciation and amortization expense associated with our cost of sales increased by \$76 million primarily due to an increase in depreciation expense of \$118 million associated with capital projects that were completed and finance leases that commenced in the latter part of 2019 and the first nine months of 2020, partially offset by lower refinery turnaround and catalyst amortization expense of \$33 million.

Renewable Diesel Segment Results

The following table includes selected financial and operating data of our renewable diesel segment for 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 37 and 38, respectively, unless otherwise noted.

	Year Ended December 31,		
	2020	2019	Change
Operating income	\$ 638	\$ 732	\$ (94)
Adjusted operating income (see note (f) on page 48)	638	576	62
Renewable diesel margin (see note (f) on page 47)	\$ 767	\$ 701	\$ 66
Operating expenses (excluding depreciation and amortization expense reflected below)	85	75	10
Depreciation and amortization expense	44	50	(6)
Sales volumes (thousand gallons per day) (see note (g) on page 49)	787	760	27

Renewable diesel segment operating income decreased by \$94 million in 2020; however, renewable diesel segment adjusted operating income, which excludes the adjustment in the table in note (f) on page 48, increased by \$62 million in 2020 compared to 2019. The increase was primarily due to higher renewable diesel segment margin.

Renewable diesel segment margin increased by \$66 million in 2020 compared to 2019. The increase was primarily due to a favorable impact from commodity derivative instruments associated with our price risk management activities. We recognized a hedge gain of \$34 million in 2020 compared to a hedge loss of \$24 million in 2019, resulting in a favorable change of \$58 million between the years.

Ethanol Segment Results

The following table includes selected financial and operating data of our ethanol segment for 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 37 and 38, respectively, unless otherwise noted.

	Year Ended December 31,		
	2020	2019	Change
Operating income (loss)	\$ (69)	\$ 3	\$ (72)
Adjusted operating income (loss) (see note (f) on page 48)	(36)	4	(40)
Ethanol margin (see note (f) on page 47)	\$ 461	\$ 598	\$ (137)
Operating expenses (excluding depreciation and amortization expense reflected below)	406	504	(98)
Depreciation and amortization expense (see note (d) on page 45)	121	90	31
Production volumes (thousand gallons per day) (see note (g) on page 49)	3,588	4,269	(681)

Ethanol segment operating income decreased by \$72 million in 2020; however, ethanol segment adjusted operating income, which excludes the adjustments in the table in note (f) on page 48, decreased by \$40 million in 2020 compared to 2019. The components of this decrease, along with the reasons for the changes in these components, are outlined below.

- Ethanol segment margin decreased by \$137 million in 2020 compared to 2019.

Ethanol segment margin is primarily affected by prices of the ethanol and corn related co-products that we sell and the cost of corn that we process. The table on page 40 reflects market reference prices that we believe had a material impact on the change in our ethanol segment margin in 2020 compared to 2019.

The decrease in ethanol segment margin was primarily due to the following:

- Lower ethanol prices had an unfavorable impact of approximately \$166 million.
- A decrease in production volumes of 681,000 gallons per day had an unfavorable impact of approximately \$92 million. As noted in “OVERVIEW AND OUTLOOK—*Overview*—Business Operations Update” on pages 33 through 35, as a result of the economic disruption from the COVID-19 pandemic, eight of our ethanol plants were temporarily idled and production was reduced at our remaining ethanol plants during the early months of the pandemic. However, demand for ethanol began to recover during the latter part of 2020, and as a result, most of our ethanol plants have recently increased production to meet current product demand.
- Higher prices on the co-products that we produce, primarily DDGs, had a favorable impact of approximately \$79 million.
- Lower corn prices had a favorable impact of approximately \$45 million.
- Ethanol segment operating expenses (excluding depreciation and amortization expense) decreased by \$98 million primarily due to lower natural gas and electricity costs of \$43 million, lower chemical and catalyst costs of \$23 million, and lower maintenance expenses of \$15 million. The decrease in operating expenses was primarily due to lower production.

The following notes relate to references on pages 32 through 44.

- (a) Cost of materials and other for the year ended December 31, 2020 includes a charge of \$224 million related to the liquidation of LIFO inventory layers attributable to our refining and ethanol segments. Our inventory levels decreased throughout 2020 due to lower production resulting from lower demand for our products caused by the negative economic impacts of COVID-19 on our business. As a result, our inventory levels at December 31, 2020 were below their December 31, 2019 levels. Of the \$224 million charge recognized for the year ended December 31, 2020, \$222 million and \$2 million is attributable to our refining and ethanol segments, respectively.
- (b) Cost of materials and other for the years ended December 31, 2020 and 2019 includes a benefit related to the blender’s tax credit. The legislation authorizing the credit through December 31, 2022 was passed and signed into law in December 2019. As a result, for the year ended December 31, 2020, we recognized a benefit of \$297 million related to the blender’s tax credit attributable to renewable diesel volumes blended during 2020. The legislation also reinstated the credit retroactively to volumes blended during 2019 and 2018, and

consequently, we recognized a benefit of \$449 million in December 2019 for the blender's tax credit attributable to volumes blended during those two years. The entire amount was recognized by us in December 2019 because the law was enacted in that month.

The above-mentioned pre-tax benefits are attributable to our reportable segments and stockholders as follows:

	Year Ended December 31,	
	2020	2019
Blender's tax credit by reportable segment		
Refining:		
Amount related to reporting period	\$ 9	\$ 16
Amount related to prior periods but recognized in reporting period	—	2
Total	9	18
Renewable diesel:		
Amount related to reporting period	288	275
Amount related to prior periods but recognized in reporting period	—	156
Total	288	431
Total recognized in reporting period	\$ 297	\$ 449
Interests to which blender's tax credit is attributable		
Valero Energy Corporation stockholders:		
Amount related to reporting period	\$ 153	\$ 154
Amount related to prior periods but recognized in reporting period	—	80
Total	153	234
Noncontrolling interest:		
Amount related to reporting period	144	137
Amount related to prior periods but recognized in reporting period	—	78
Total	144	215
Total recognized in reporting period	\$ 297	\$ 449

- (c) The market value of our inventories accounted for under the LIFO method fell below their historical cost on an aggregate basis as of March 31, 2020. As a result, we recorded an LCM inventory valuation adjustment of \$2.5 billion in March 2020. The market value of our LIFO inventories improved due to the subsequent recovery in market prices, which resulted in a full reversal of the reserve by September 30, 2020. The LCM inventory valuation adjustment for the year ended December 31, 2020 reflects a net benefit of \$19 million due solely to the foreign currency translation effect of the portion of the LCM inventory valuation adjustments attributable to our international operations.
- (d) Depreciation and amortization expense for the year ended December 31, 2020 includes \$30 million in accelerated depreciation related to a change in the estimated useful life of one of our ethanol plants.
- (e) "Other income, net" for the year ended December 31, 2019 includes a \$22 million charge from the early redemption of \$850 million of our 6.125 percent senior notes due February 1, 2020.

- (f) We use certain financial measures (as noted below) that are not defined under U.S. GAAP and are considered to be non-GAAP financial measures.

We have defined these non-GAAP measures and believe they are useful to the external users of our financial statements, including industry analysts, investors, lenders, and rating agencies. We believe these measures are useful to assess our ongoing financial performance because, when reconciled to their most comparable U.S. GAAP measures, they provide improved comparability between periods through the exclusion of certain items that we believe are not indicative of our core operating performance and that may obscure our underlying business results and trends. These non-GAAP measures should not be considered as alternatives to their most comparable U.S. GAAP measures nor should they be considered in isolation or as a substitute for an analysis of our results of operations as reported under U.S. GAAP. In addition, these non-GAAP measures may not be comparable to similarly titled measures used by other companies because we may define them differently, which diminishes their utility.

Non-GAAP financial measures are as follows:

- **Refining margin** is defined as refining operating income (loss) excluding the blender's tax credit not attributable to volumes blended during the applicable period, the LIFO liquidation adjustment, the LCM inventory valuation adjustment, operating expenses (excluding depreciation and amortization expense), depreciation and amortization expense, and other operating expenses, as reflected in the table below.

	Year Ended December 31,	
	2020	2019
Reconciliation of refining operating income (loss) to refining margin		
Refining operating income (loss)	\$ (1,342)	\$ 4,022
Adjustments:		
Blender's tax credit (see note (b))	—	(2)
LIFO liquidation adjustment (see note (a))	222	—
LCM inventory valuation adjustment (see note (c))	(19)	—
Operating expenses (excluding depreciation and amortization expense)	3,944	4,289
Depreciation and amortization expense	2,138	2,062
Other operating expenses	34	20
Refining margin	<u>\$ 4,977</u>	<u>\$ 10,391</u>

- **Renewable diesel margin** is defined as renewable diesel operating income excluding the blender's tax credit not attributable to volumes blended during the applicable period, operating expenses (excluding depreciation and amortization expense), and depreciation and amortization expense, as reflected in the table below.

	Year Ended December 31,	
	2020	2019
Reconciliation of renewable diesel operating income to renewable diesel margin		
Renewable diesel operating income	\$ 638	\$ 732
Adjustments:		
Blender's tax credit (see note (b))	—	(156)
Operating expenses (excluding depreciation and amortization expense)	85	75
Depreciation and amortization expense	44	50
Renewable diesel margin	<u>\$ 767</u>	<u>\$ 701</u>

- **Ethanol margin** is defined as ethanol operating income (loss) excluding the LIFO liquidation adjustment, operating expenses (excluding depreciation and amortization expense), depreciation and amortization expense, and other operating expenses, as reflected in the table below.

	Year Ended December 31,	
	2020	2019
Reconciliation of ethanol operating income (loss) to ethanol margin		
Ethanol operating income (loss)	\$ (69)	\$ 3
Adjustments:		
LIFO liquidation adjustment (see note (a))	2	—
Operating expenses (excluding depreciation and amortization expense)	406	504
Depreciation and amortization expense (see note (d))	121	90
Other operating expenses	1	1
Ethanol margin	<u>\$ 461</u>	<u>\$ 598</u>

- **Adjusted refining operating income (loss)** is defined as refining segment operating income (loss) excluding the blender's tax credit not attributable to volumes blended during the applicable period, the LIFO liquidation adjustment, the LCM inventory valuation adjustment, and other operating expenses, as reflected in the table below.

	Year Ended December 31,	
	2020	2019
Reconciliation of refining operating income (loss) to adjusted refining operating income		
Refining operating income (loss)	\$ (1,342)	\$ 4,022
Adjustments:		
Blender's tax credit (see note (b))	—	(2)
LIFO liquidation adjustment (see note (a))	222	—
LCM inventory valuation adjustment (see note (c))	(19)	—
Other operating expenses	34	20
Adjusted refining operating income (loss)	<u>\$ (1,105)</u>	<u>\$ 4,040</u>

- **Adjusted renewable diesel operating income** is defined as renewable diesel segment operating income excluding the blender's tax credit not attributable to volumes blended during the applicable period, as reflected in the table below.

	Year Ended December 31,	
	2020	2019
Reconciliation of renewable diesel operating income to adjusted renewable diesel operating income		
Renewable diesel operating income	\$ 638	\$ 732
Adjustments:		
Blender's tax credit (see note (b))	—	(156)
Adjusted renewable diesel operating income	<u>\$ 638</u>	<u>\$ 576</u>

- **Adjusted ethanol operating income (loss)** is defined as ethanol segment operating income (loss) excluding the LIFO liquidation adjustment, the change in estimated useful life, and other operating expenses, as reflected in the table below.

	Year Ended December 31,	
	2020	2019
Reconciliation of ethanol operating income (loss) to adjusted ethanol operating income (loss)		
Ethanol operating income (loss)	\$ (69)	\$ 3
Adjustments:		
LIFO liquidation adjustment (see note (a))	2	—
Change in estimated useful life (see note (d))	30	—
Other operating expenses	1	1
Adjusted ethanol operating income (loss)	<u>\$ (36)</u>	<u>\$ 4</u>

- **Adjusted operating income (loss)** is defined as total company operating income (loss) excluding the blender’s tax credit not attributable to volumes blended during the applicable period, the LIFO liquidation adjustment, the LCM inventory valuation adjustment, the change in estimated useful life, and other operating expenses, as reflected in the table below.

	Year Ended December 31,	
	2020	2019
Reconciliation of total company operating income (loss) to adjusted operating income (loss)		
Total company operating income (loss)	\$ (1,579)	\$ 3,836
Adjustments:		
Blender’s tax credit (see note (b))	—	(158)
LIFO liquidation adjustment (see note (a))	224	—
LCM inventory valuation adjustment (see note (c))	(19)	—
Change in estimated useful life (see note (d))	30	—
Other operating expenses	35	21
Adjusted operating income (loss)	<u>\$ (1,309)</u>	<u>\$ 3,699</u>

- (g) We use throughput volumes, sales volumes, and production volumes for the refining segment, renewable diesel segment, and ethanol segment, respectively, due to their general use by others who operate facilities similar to those included in our segments.

LIQUIDITY AND CAPITAL RESOURCES

Overview

During the first half of 2020, our liquidity was negatively impacted by the significant economic effects resulting from the COVID-19 pandemic as described in “OVERVIEW AND OUTLOOK—*Overview*—Business Operations Update.” However, we took a number of actions to address the economic environment and its impact on our liquidity, most notably two public debt offerings totaling \$4.0 billion before deducting the underwriting discounts and debt issuance costs, which are described in Note 10 of Notes to Consolidated Financial Statements. We took other actions to address our liquidity and those actions are described in “OVERVIEW AND OUTLOOK—*Overview*—Business Operations Update” on pages 33 through 35 and in the discussion of matters impacting our liquidity and capital resources below. As a result of the actions taken during 2020, our liquidity position has improved as of December 31, 2020 compared to the end of the first quarter of 2020, which was when the pandemic began to have a negative impact on our business.

Our Liquidity

Our liquidity consisted of the following as of December 31, 2020 (in millions):

Available borrowing capacity from committed facilities:	
Valero Revolver	\$ 3,966
364-day Revolving Credit Facility	875
Canadian Revolver ^(a)	114
Accounts receivable sales facility	885
Letter of credit facility	50
Total available borrowing capacity	5,890
Cash and cash equivalents ^(b)	3,152
Total liquidity	\$ 9,042

(a) The amount for our Canadian Revolver is shown in U.S. dollars. As set forth in the summary of our credit facilities in Note 10 of Notes to Consolidated Financial Statements, the availability under our Canadian Revolver as of December 31, 2020 in Canadian dollars was C\$145 million.

(b) Excludes \$161 million of cash and cash equivalents related to our variable interest entities (VIEs) that is available for use only by our VIEs.

Information about our outstanding borrowings, letters of credit issued, and availability under our credit facilities is reflected in Note 10 of Notes to Consolidated Financial Statements.

We believe that cash provided by operations, along with cash from our public debt offerings in April and September of 2020 and available borrowings under our credit facilities, is sufficient to fund our ongoing operating requirements and other commitments. We expect that, to the extent necessary, we can raise additional cash through equity or debt financings in the public and private capital markets or the arrangement of additional credit facilities. However, there can be no assurances regarding the availability of any future financings or additional credit facilities or whether such financings or additional credit facilities can be made available on terms that are acceptable to us.

Cash Flows

Components of our cash flows are set forth below (in millions):

	Year Ended December 31,	
	2020	2019
Cash flows provided by (used in):		
Operating activities	\$ 948	\$ 5,531
Investing activities	(2,425)	(3,001)
Financing activities:		
Borrowings	4,570	2,131
Other financing activities	(2,493)	(5,128)
Financing activities	2,077	(2,997)
Effect of foreign exchange rate changes on cash	130	68
Net increase (decrease) in cash and cash equivalents	\$ 730	\$ (399)

Cash Flows for the Year Ended December 31, 2020

During the year ended December 31, 2020, we used \$948 million of cash generated by our operations and \$4.6 billion in borrowings to make \$2.4 billion of investments in our business, fund \$2.5 billion of other financing activities, and increase our available cash on hand by \$730 million. The borrowings are described in Note 10 of Notes to Consolidated Financial Statements.

As previously noted, our operations generated \$948 million of cash in 2020, which was negatively impacted by an unfavorable change in working capital of \$345 million. The change in working capital was affected primarily by a \$740 million use of cash¹¹ resulting from the rapid decline in market prices of refined petroleum products and crude oil as a result of the negative economic effects of the COVID-19 pandemic that impacted our receivables and accounts payable. This use of cash, along with other uses of cash, were partially offset by a \$1.0 billion source of cash driven by a reduction in inventory levels on hand. Details regarding the components of the change in working capital, along with the reasons for the changes in those components, are described in Note 19 of Notes to Consolidated Financial Statements. In addition, see “RESULTS OF OPERATIONS” for an analysis of our net loss.

Our investing activities of \$2.4 billion consisted of \$2.5 billion in capital investments, as defined below, of which \$548 million related to self-funded capital investments by DGD, and \$251 million was related to capital expenditures of VIEs other than DGD.

Other financing activities of \$2.5 billion consisted primarily of \$1.6 billion in dividend payments, \$490 million of payments of debt and finance lease obligations, \$208 million to pay distributions to noncontrolling interests, and \$156 million for the purchase of common stock for treasury.

Cash Flows for the Year Ended December 31, 2019

During the year ended December 31, 2019, we used \$5.5 billion of cash generated by our operations, \$2.1 billion in borrowings, and \$399 million of cash on hand to make \$3.0 billion of investments in our business and fund \$5.1 billion of other financing activities. The borrowings are described in Note 10 of Notes to Consolidated Financial Statements.

As previously noted, our operations generated \$5.5 billion of cash in 2019, driven primarily by net income of \$2.8 billion, noncash charges to income of \$2.5 billion, and a positive change in working capital of \$294 million. Details regarding the components of the change in working capital, along with the reasons for the changes in those components, are described in Note 19 of Notes to Consolidated Financial Statements. In addition, see “RESULTS OF OPERATIONS” for an analysis of our net income.

Our investing activities of \$3.0 billion consisted primarily of \$2.9 billion in capital investments, as defined below, of which \$160 million is related to self-funded capital investments by DGD, and \$225 million was related to capital expenditures of VIEs other than DGD.

Other financing activities of \$5.1 billion consisted primarily of \$1.8 billion of payments of debt and finance lease obligations, \$1.5 billion in dividend payments, \$950 million to acquire all of the outstanding publicly held common units of VLP, and \$777 million for the purchase of common stock for treasury.

¹¹ Represents the net cash flow change in “receivables, net” of \$3.3 billion and accounts payable of \$4.1 billion during the year ended December 31, 2020, as described in Note 19 of Notes to Consolidated Financial Statements.

Capital Investments

Our operations are highly capital intensive. Each of our refineries and plants comprises a large base of property assets, consisting of a series of interconnected, highly integrated and interdependent crude oil and other feedstock processing facilities and supporting logistical infrastructure (Units), and these Units are improved continuously. The cost of improvements, which consist of the addition of new Units and betterments of existing Units, can be significant. We plan for these improvements by developing a multi-year capital program that is updated and revised based on changing internal and external factors.

We have historically acquired our refineries at amounts significantly below their replacement costs, whereas our improvements are made at full replacement value. As such, the costs for improving our refinery assets increase over time and are significant in relation to the amounts we paid to acquire our refineries. We make improvements to our refineries in order to maintain and enhance their operating reliability, to meet environmental obligations with respect to reducing emissions and removing prohibited elements from the products we produce, or to enhance their profitability. Reliability and environmental improvements generally do not increase the throughput capacities of our refineries. Improvements that enhance refinery profitability may increase throughput capacity, but many of these improvements allow our refineries to process different types of crude oil and to refine crude oil into products with higher market values. Therefore, many of our improvements do not increase throughput capacity significantly.

Our capital investments include capital expenditures, deferred turnaround and catalyst cost expenditures, and investments in unconsolidated joint ventures. Capital investments attributable to Valero, which is a non-GAAP financial measure, reflects our net share of capital investments and is defined as all capital expenditures, deferred turnaround and catalyst cost expenditures, and investments in unconsolidated joint ventures presented in our consolidated statements of cash flows, excluding the portion of DGD's capital investments attributable to our joint venture partner and all of the capital expenditures of other VIEs.

We are a 50/50 joint venture partner in DGD and consolidate DGD's financial statements; as a result, all of DGD's net cash provided by operating activities (or operating cash flow) is included in our consolidated net cash provided by operating activities. DGD's partners use DGD's operating cash flow (excluding changes in its current assets and current liabilities) to fund its capital investments rather than distribute all of that cash to themselves. Because DGD's operating cash flow is effectively attributable to each partner, only 50 percent of DGD's capital investments should be attributed to our net share of capital investments. We also exclude the capital expenditures of our other consolidated VIEs because we do not operate those VIEs. We believe capital investments attributable to Valero is an important measure because it more accurately reflects our capital investments.

Capital investments attributable to Valero should not be considered as an alternative to capital investments, its most comparable U.S. GAAP measure, nor should it be considered in isolation or as a substitute for an analysis of our cash flows as reported under U.S. GAAP. In addition, this non-GAAP measure may not be comparable to similarly titled measures used by other companies because we may define it differently, which may diminish its utility.

	Year Ended December 31,	
	2020	2019
Reconciliation of capital investments to capital investments attributable to Valero		
Capital expenditures (excluding VIEs)	\$ 1,014	\$ 1,627
Capital expenditures of VIEs:		
DGD	523	142
Other VIEs	251	225
Deferred turnaround and catalyst cost expenditures (excluding VIEs)	623	762
Deferred turnaround and catalyst cost expenditures of DGD	25	18
Investments in unconsolidated joint ventures	54	164
Capital investments	<u>2,490</u>	<u>2,938</u>
Adjustments:		
DGD's capital investments attributable to our joint venture partner	(274)	(80)
Capital expenditures of other VIEs	(251)	(225)
Capital investments attributable to Valero	<u>\$ 1,965</u>	<u>\$ 2,633</u>

We expect to incur capital investments and capital investments attributable to Valero in 2021 as follows by reportable segment (in millions):

Refining	\$ 1,600
Renewable diesel	720
Ethanol	40
Corporate	25
Capital investments	<u>2,385</u>
Adjustments:	
DGD's capital investments attributable to our joint venture partner	(360)
Capital expenditures of other VIEs	(25)
Capital investments attributable to Valero	<u>\$ 2,000</u>

Approximately 60 percent of the capital investments attributable to Valero are for sustaining the business and 40 percent are for growth strategies, almost half of which is allocated to expanding the renewable diesel business. However, we continuously evaluate our capital budget and make changes as conditions warrant. This capital investment estimate excludes strategic acquisitions, if any.

Other Matters Impacting Liquidity and Capital Resources

Stock Purchase Program

On January 23, 2018, our board of directors authorized the 2018 Program for the purchase of our outstanding common stock. As of December 31, 2020, we had \$1.4 billion available for purchase under the 2018 Program, which has no expiration date. We have not purchased any shares of our common stock under the 2018 Program since mid-March 2020, and we will evaluate the timing of repurchases when appropriate. We have no obligation to make purchases under this program.

Pension Plan Funding

We plan to contribute \$128 million to our pension plans and \$22 million to our other postretirement benefit plans during 2021. See Note 14 of Notes to Consolidated Financial Statements for a discussion of our employee benefit plans.

Environmental Matters

Our operations are subject to extensive environmental regulations by governmental authorities relating to the discharge of materials into the environment, waste management, pollution prevention measures, GHG emissions, and characteristics and composition of gasolines and distillates. Because environmental laws and regulations are becoming more complex and stringent and new environmental laws and regulations are continuously being enacted or proposed, the level of future expenditures required for environmental matters could increase in the future. In addition, any major upgrades in any of our refineries or plants could require material additional expenditures to comply with environmental laws and regulations. See Note 9 of Notes to Consolidated Financial Statements for disclosure of our environmental liabilities.

Tax Matters

Under deferrals provided by recently passed legislation, such as the CARES Act in the U.S., and by various taxing authorities under other existing legislation, we deferred approximately \$440 million of income and indirect (e.g., VAT and motor fuel taxes) tax payments due in the first and second quarters of 2020. As of December 31, 2020, we had approximately \$250 million of deferred tax payments. Of the \$250 million, approximately 70 percent will be paid in 2021 and 30 percent in 2022.

We take tax positions in our tax returns from time to time that may not be ultimately allowed by the relevant taxing authority. When we take such positions, we evaluate the likelihood of sustaining those positions and determine the amount of tax benefit arising from such positions, if any, that should be recognized in our financial statements. Tax benefits not recognized by us are recorded as a liability for unrecognized tax benefits, which represents our potential future obligation to various taxing authorities if the tax positions are not sustained.

As of December 31, 2020, our liability for unrecognized tax benefits, excluding related interest and penalties, was \$821 million. Of this amount, \$525 million is associated with refund claims associated with taxes paid on incentive payments received from the U.S. federal government for blending biofuels into refined petroleum products. We recorded a tax refund receivable of \$525 million in connection with our refund claims, but we also recorded a liability for unrecognized tax benefits of \$525 million due to the complexity of this matter and uncertainties with respect to sustaining these refund claims. Therefore, our financial position, results of operations, and liquidity will not be negatively impacted if we are unsuccessful in sustaining these refund claims. The remaining liability for unrecognized tax benefits, excluding related interest and penalties, of \$296 million represents our potential future obligations to various taxing authorities if the tax positions associated with that liability are not sustained.

Details about our liability for unrecognized tax benefits, along with other information about our unrecognized tax benefits, are included in Note 16 of Notes to Consolidated Financial Statements.

Cash Held by Our International Subsidiaries

As of December 31, 2020, \$2.5 billion of our cash and cash equivalents was held by our international subsidiaries. Cash held by our international subsidiaries can be repatriated to us without any U.S. federal income tax consequences, but certain other taxes may apply, including, but not limited to, withholding taxes imposed by certain international jurisdictions and U.S. state income taxes. Therefore, there is a cost to repatriate cash held by certain of our international subsidiaries to us, but we believe that such amount is not material to our financial position or liquidity.

Concentration of Customers

Our operations have a concentration of customers in the refining industry and customers who are refined petroleum product wholesalers and retailers. These concentrations of customers may impact our overall exposure to credit risk, either positively or negatively, in that these customers may be similarly affected by changes in economic or other conditions including the uncertainties concerning the COVID-19 pandemic and volatility in the global oil markets. However, we believe that our portfolio of accounts receivable is sufficiently diversified to the extent necessary to minimize potential credit risk. Historically, we have not had any significant problems collecting our accounts receivable. See also Item 1A, “RISK FACTORS”—Risks Related to Our Business, Industry, and Operations—*Developments with respect to low-carbon fuel policies and the market for alternative fuels may affect demand for our renewable fuels and could adversely affect our financial performance.*

OFF-BALANCE SHEET ARRANGEMENTS

We have not entered into any transactions, agreements, or other contractual arrangements that would result in off-balance sheet liabilities.

CONTRACTUAL OBLIGATIONS

Our contractual obligations as of December 31, 2020 are summarized below (in millions).

	Payments Due by Year						Total
	2021	2022	2023	2024	2025	Thereafter	
Debt and finance lease obligations (a)	\$ 790	\$ 188	\$ 1,632	\$ 1,103	\$ 1,828	\$ 9,972	\$ 15,513
Debt obligations – interest payments	550	544	524	501	469	3,544	6,132
Operating lease liabilities (b)	324	231	194	155	107	435	1,446
Purchase obligations	14,641	1,871	1,268	1,246	1,124	2,445	22,595
Other long-term liabilities (c)	—	129	225	235	259	1,887	2,735
Total	\$ 16,305	\$ 2,963	\$ 3,843	\$ 3,240	\$ 3,787	\$ 18,283	\$ 48,421

(a) Debt obligations exclude amounts related to unamortized discounts and debt issuance costs. Finance lease obligations include related interest expense. Debt obligations due in 2021 include \$598 million associated with borrowings under the IEnova Revolver (as defined and described in Note 10 of Notes to Consolidated Financial Statements) for the construction of terminals in Mexico by Central Mexico Terminals (as defined and described

in Note 13 of Notes to Consolidated Financial Statements). The IEnova Revolver is only available to the operations of Central Mexico Terminals, and its creditors do not have recourse against us.

(b) Operating lease liabilities include related interest expense.

(c) Other long-term liabilities exclude amounts related to the long-term portion of operating lease liabilities that are separately presented above.

Debt and Finance Lease Obligations

Our debt and finance lease obligations are described in Notes 10 and 6, respectively, of Notes to Consolidated Financial Statements.

Our debt and financing agreements do not have rating agency triggers that would automatically require us to post additional collateral. However, in the event of certain downgrades of our senior unsecured debt by the ratings agencies, the cost of borrowings under some of our bank credit facilities and other arrangements may increase. As of December 31, 2020, all of our ratings on our senior unsecured debt, including debt guaranteed by us, are at or above investment grade level as follows:

Rating Agency	Rating
Moody's Investors Service	Baa2 (negative outlook)
Standard & Poor's Ratings Services	BBB (negative outlook)
Fitch Ratings	BBB (negative outlook)

We cannot provide assurance that these ratings will remain in effect for any given period of time or that one or more of these ratings will not be lowered or withdrawn entirely by a rating agency. We note that these credit ratings are not recommendations to buy, sell, or hold our securities. Each rating should be evaluated independently of any other rating. Any future reduction below investment grade or withdrawal of one or more of our credit ratings could have a material adverse impact on our ability to obtain short- and long-term financing and the cost of such financings.

Debt Obligations – Interest Payments

Interest payments for our debt obligations as described in Note 10 of Notes to Consolidated Financial Statements are the expected payments based on information available as of December 31, 2020.

Operating Lease Liabilities

Our operating lease liabilities arise from leasing arrangements for the right to use various classes of underlying assets as described in Note 6 of Notes to Consolidated Financial Statements. Operating lease liabilities are recognized for leasing arrangements with terms greater than one year and are not reduced by minimum lease payments to be received by us under subleases.

Purchase Obligations

A purchase obligation is an enforceable and legally binding agreement to purchase goods or services that specifies significant terms, including (i) fixed or minimum quantities to be purchased, (ii) fixed, minimum, or variable price provisions, and (iii) the approximate timing of the transaction. We have various purchase obligations under certain crude oil and other feedstock supply arrangements, industrial gas supply arrangements (such as hydrogen supply arrangements), natural gas supply arrangements, and various throughput, transportation and terminaling agreements. We enter into these contracts to ensure an adequate supply of feedstock and utilities and adequate storage capacity to operate our refineries and plants. Substantially all of our purchase obligations are based on market prices or adjustments based on market indices. Certain of these purchase obligations include fixed or minimum volume requirements, while others are based on our usage requirements. The purchase obligation amounts shown in the

preceding table include both short- and long-term obligations and are based on (i) fixed or minimum quantities to be purchased and (ii) fixed or estimated prices to be paid based on current market conditions.

Other Long-Term Liabilities

Our other long-term liabilities are described in Note 9 of Notes to Consolidated Financial Statements. For purposes of reflecting amounts for other long-term liabilities in the preceding table, we made our best estimate of expected payments for each type of liability based on information available as of December 31, 2020.

NEW ACCOUNTING PRONOUNCEMENTS

As discussed in Note 1 of Notes to Consolidated Financial Statements, certain new financial accounting pronouncements became effective in 2020 and January 2021. The effect on our financial statements upon adoption of these pronouncements is discussed in the above-referenced note.

CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in accordance with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates. The following summary provides further information about our critical accounting policies that involve critical accounting estimates, and should be read in conjunction with Note 1 of Notes to Consolidated Financial Statements, which summarizes our significant accounting policies. 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.

Unrecognized Tax Benefits

We take tax positions in our tax returns from time to time that may not be ultimately allowed by the relevant taxing authority. When we take such positions, we evaluate the likelihood of sustaining those positions and determine the amount of tax benefit arising from such positions, if any, that should be recognized in our financial statements. Tax benefits not recognized by us are recorded as a liability for unrecognized tax benefits, which represents our potential future obligation to various taxing authorities if the tax positions are not sustained.

The evaluation of tax positions and the determination of the benefit arising from such positions that are recognized in our financial statements requires us to make significant judgments and estimates based on an analysis of complex tax laws and regulations and related interpretations. These judgments and estimates are subject to change due to many factors, including the progress of ongoing tax audits, case law, and changes in legislation.

Details of our liability for unrecognized tax benefits, along with other information about our unrecognized tax benefits, are included in Note 16 of Notes to Consolidated Financial Statements.

Impairment of Long-Lived Assets and Goodwill

Long-lived assets (primarily property, plant, and equipment) 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. 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.

In order to test for recoverability, we must make estimates of projected cash flows related to the asset being evaluated; such estimates include, but are not limited to, assumptions about future sales volumes, commodity prices, operating costs, margins, the use or disposition of the asset, the asset's estimated remaining useful life, and future expenditures necessary to maintain the asset's existing service potential. Due to the significant subjectivity of the assumptions used to test for recoverability, changes in market conditions could result in significant impairment charges in the future, thus affecting our earnings.

Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate the asset might be impaired. We first evaluate qualitative factors to determine if it is more likely than not (i.e., a likelihood of more than 50%) that the fair value of a reporting unit is less than its carrying amount, including goodwill, by taking into consideration relevant events and circumstances. If, after assessing the totality of events or circumstances, we determine that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, no further testing is necessary. However, if we determine that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then we perform the quantitative goodwill impairment test. An impairment loss is recognized if the carrying amount of the reporting unit, including goodwill, exceeds its fair value.

During 2020, we performed qualitative assessments of the reporting unit to which our goodwill is related to determine if the quantitative impairment test was necessary. We considered company-specific information, such as current and future financial performance, as well as external factors, that could affect the fair value of the reporting unit. We evaluated (i) the impact that the COVID-19 pandemic had on the demand for our products and utilization of our U.S. refineries, (ii) the expected contribution from the reporting unit, which historically has had strong performance, and (iii) the estimated margin between the carrying amount and the implied enterprise value of our reporting unit. Due to the significant subjectivity of the assumptions used to test for impairment, changes in market conditions could result in significant impairment charges in the future, thus affecting our earnings.

As of December 31, 2020, we determined there was no impairment of our long-lived assets or goodwill as discussed in Note 2 of Notes to Consolidated Financial Statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

COMMODITY PRICE RISK

We are exposed to market risks related to the volatility in the price of feedstocks (primarily crude oil and corn), the products we produce (primarily refined petroleum products), and natural gas used in our operations. To reduce the impact of price volatility on our results of operations and cash flows, we use commodity derivative instruments, including futures and options to manage the volatility of:

- inventories and firm commitments to purchase inventories generally for amounts by which our current year inventory levels (determined on a LIFO basis) differ from our previous year-end LIFO inventory levels; and

- forecasted purchases and/or product sales at existing market prices that we deem favorable.

Our positions in commodity derivative instruments are monitored and managed on a daily basis by our risk control group to ensure compliance with our stated risk management policy that has been approved by our board of directors.

As of December 31, 2020 and 2019, the amount of gain or loss that would have resulted from a 10 percent increase or decrease in the underlying price for all of our commodity derivative instruments entered into for purposes other than trading with which we have market risk was not material. See Note 21 of Notes to Consolidated Financial Statements for notional volumes associated with these derivative contracts as of December 31, 2020.

COMPLIANCE PROGRAM PRICE RISK

We are exposed to market risk related to the volatility in the price of credits needed to comply with various governmental and regulatory environmental compliance programs. To manage this risk, we enter into contracts to purchase these credits when prices are deemed favorable. As of December 31, 2020 and 2019, the amount of gain or loss in the fair value of derivative instruments that would have resulted from a 10 percent increase or decrease in the underlying price of the contracts was not material. See Note 21 of Notes to Consolidated Financial Statements for a discussion about these compliance programs.

INTEREST RATE RISK

The following table provides information about our debt instruments (dollars in millions), the fair values of which are sensitive to changes in interest rates. Principal cash flows and related weighted-average interest rates by expected maturity dates are presented. See Note 10 of Notes to Consolidated Financial Statements for additional information related to our debt.

	December 31, 2020							
	Expected Maturity Dates							
	2021 (a)	2022	2023 (b)	2024	2025	There- after	Total (c)	Fair Value
Fixed rate	\$ —	\$ —	\$ 850	\$ 925	\$ 1,650	\$ 8,474	\$ 11,899	\$ 13,899
Average interest rate	— %	— %	2.7 %	1.2 %	3.1 %	5.1 %	4.4 %	
Floating rate (d)	\$ 603	\$ 6	\$ 595	\$ —	\$ —	\$ —	\$ 1,204	\$ 1,204
Average interest rate	3.9 %	3.0 %	1.4 %	— %	— %	— %	2.7 %	
	December 31, 2019							
	Expected Maturity Dates							
	2020 (a)	2021	2022	2023	2024	There- after	Total (c)	Fair Value
Fixed rate	\$ —	\$ 11	\$ —	\$ —	\$ —	\$ 8,474	\$ 8,485	\$ 10,099
Average interest rate	— %	5 %	— %	— %	— %	5.2 %	5.2 %	
Floating rate (d)	\$ 453	\$ 6	\$ 6	\$ 19	\$ —	\$ —	\$ 484	\$ 484
Average interest rate	5.0 %	4.5 %	4.5 %	4.5 %	— %	— %	5.0 %	

(a) As of December 31, 2020 and 2019, our floating rate debt due in 2021 and 2020 includes \$598 million and \$348 million, respectively, associated with borrowings under the IEnova Revolver for the construction of terminals in Mexico by Central Mexico Terminals. The IEnova Revolver is only available to the operations of Central Mexico Terminals, and its creditors do not have recourse against us.

- (b) As of December 31, 2020, our floating rate debt also includes \$575 million aggregate principal amount of our Floating Rate Notes issued in September 2020, which are due September 15, 2023.
- (c) Excludes unamortized discounts and debt issuance costs.
- (d) As of December 31, 2020 and 2019, we had an interest rate swap associated with \$31 million and \$36 million, respectively, of our floating rate debt resulting in an effective interest rate of 3.85 percent as of each of those reporting dates. The fair value of the swap was immaterial for all periods presented.

FOREIGN CURRENCY RISK

We are exposed to exchange rate fluctuations on transactions related to our international operations that are denominated in currencies other than the local (functional) currencies of those operations. To manage our exposure to these exchange rate fluctuations, we use foreign currency contracts. The following table provides information about our foreign currency contracts (dollars in millions), the fair values of which are sensitive to changes in foreign currency exchange rates. Contracts that were outstanding as of December 31, 2020 mature on or before April 15, 2021 and those outstanding as of December 31, 2019 matured in 2020. Currency abbreviations presented below are as follows: U.S. dollars (USD), Canadian dollars (CAD), and pounds sterling (GBP).

	Receive USD/ Pay CAD	Receive USD/ Pay GBP	Receive CAD/ Pay USD
December 31, 2020			
Contract amount	\$ 228	\$ 97	\$ 1,600
Weighted-average contractual exchange rate	0.78205	1.34454	0.78492
Fair value liability	\$ (1)	\$ (1)	\$ (2)
December 31, 2019			
Contract amount	\$ 406	\$ 333	\$ 2,250
Weighted-average contractual exchange rate	0.75911	1.31201	0.76217
Fair value asset (liability)	\$ (6)	\$ (4)	\$ 27

See Note 21 of Notes to Consolidated Financial Statements for a discussion about our foreign currency risk management activities.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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) under the Securities Exchange Act of 1934) for Valero Energy Corporation. Our management evaluated the effectiveness of Valero’s internal control over financial reporting as of December 31, 2020. In its evaluation, management used the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Management believes that as of December 31, 2020, our internal control over financial reporting was effective based on those criteria.

Our independent registered public accounting firm has issued an attestation report on the effectiveness of our internal control over financial reporting, which begins on page 64 of this report.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Valero Energy Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Valero Energy Corporation and subsidiaries (the Company) as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, equity, and cash flows for each of the years in the three-year period ended December 31, 2020, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 23, 2021 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated 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 consolidated 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 consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Assessment of gross unrecognized tax benefits

As discussed in Note 16 to the consolidated financial statements, as of December 31, 2020, the Company has gross unrecognized tax benefits, excluding related interest and penalties, of \$847 million. The Company's tax positions are subject to examination by local taxing authorities and the resolution of such examinations may span multiple years. Due to the complexities inherent in the interpretation of income tax laws in domestic and international jurisdictions, it is uncertain whether some of the Company's income tax positions will be sustained upon examination.

We identified the assessment of the Company's gross unrecognized tax benefits as a critical audit matter. Complex auditor judgment was required in evaluating the Company's interpretation of income tax laws and assessing the Company's estimate of the ultimate resolution of its income tax positions.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's income tax process. This included controls to evaluate which of the Company's income tax positions may not be sustained upon examination and estimate the gross unrecognized tax benefits. We involved domestic and international income tax professionals with specialized skills and knowledge, who assisted in:

- obtaining an understanding and evaluating the Company's income tax positions as filed or intended to be filed
- evaluating the Company's interpretation of income tax laws by developing an independent assessment of the Company's income tax positions and comparing the results to the Company's assessment
- inspecting settlements and communications with applicable taxing authorities
- assessing the expiration of applicable statutes of limitations.

In addition, we evaluated the Company's ability to estimate its gross unrecognized tax benefits by comparing historical uncertain income tax positions, including the gross unrecognized tax benefits, to actual results upon conclusion of tax examinations.

/s/ KPMG LLP

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

San Antonio, Texas
February 23, 2021

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Valero Energy Corporation:

Opinion on Internal Control Over Financial Reporting

We have audited Valero Energy Corporation and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, equity, and cash flows for each of the years in the three-year period ended December 31, 2020, and the related notes (collectively, the consolidated financial statements), and our report dated February 23, 2021 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the

assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ KPMG LLP

San Antonio, Texas
February 23, 2021

VALERO ENERGY CORPORATION
CONSOLIDATED BALANCE SHEETS
(millions of dollars, except par value)

	December 31,	
	2020	2019
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 3,313	\$ 2,583
Receivables, net	6,109	8,988
Inventories	6,038	7,013
Prepaid expenses and other	384	385
Total current assets	<u>15,844</u>	<u>18,969</u>
Property, plant, and equipment, at cost	46,967	44,294
Accumulated depreciation	<u>(16,578)</u>	<u>(15,030)</u>
Property, plant, and equipment, net	30,389	29,264
Deferred charges and other assets, net	<u>5,541</u>	<u>5,631</u>
Total assets	<u>\$ 51,774</u>	<u>\$ 53,864</u>
LIABILITIES AND EQUITY		
Current liabilities:		
Current portion of debt and finance lease obligations	\$ 723	\$ 494
Accounts payable	6,082	10,205
Accrued expenses	994	949
Taxes other than income taxes payable	1,372	1,304
Income taxes payable	<u>112</u>	<u>208</u>
Total current liabilities	<u>9,283</u>	<u>13,160</u>
Debt and finance lease obligations, less current portion	<u>13,954</u>	<u>9,178</u>
Deferred income tax liabilities	<u>5,275</u>	<u>5,103</u>
Other long-term liabilities	<u>3,620</u>	<u>3,887</u>
Commitments and contingencies		
Equity:		
Valero Energy Corporation stockholders' equity:		
Common stock, \$0.01 par value; 1,200,000,000 shares authorized; 673,501,593 and 673,501,593 shares issued	7	7
Additional paid-in capital	6,814	6,821
Treasury stock, at cost; 265,096,171 and 264,209,742 common shares	(15,719)	(15,648)
Retained earnings	28,953	31,974
Accumulated other comprehensive loss	<u>(1,254)</u>	<u>(1,351)</u>
Total Valero Energy Corporation stockholders' equity	18,801	21,803
Noncontrolling interests	<u>841</u>	<u>733</u>
Total equity	<u>19,642</u>	<u>22,536</u>
Total liabilities and equity	<u>\$ 51,774</u>	<u>\$ 53,864</u>

See Notes to Consolidated Financial Statements.

VALERO ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF INCOME
(millions of dollars, except per share amounts)

	Year Ended December 31,		
	2020	2019	2018
Revenues (a)	\$ 64,912	\$ 108,324	\$ 117,033
Cost of sales:			
Cost of materials and other	58,933	96,476	104,732
Lower of cost or market (LCM) inventory valuation adjustment	(19)	—	—
Operating expenses (excluding depreciation and amortization expense reflected below)	4,435	4,868	4,690
Depreciation and amortization expense	2,303	2,202	2,017
Total cost of sales	65,652	103,546	111,439
Other operating expenses	35	21	45
General and administrative expenses (excluding depreciation and amortization expense reflected below)	756	868	925
Depreciation and amortization expense	48	53	52
Operating income (loss)	(1,579)	3,836	4,572
Other income, net	132	104	130
Interest and debt expense, net of capitalized interest	(563)	(454)	(470)
Income (loss) before income tax expense (benefit)	(2,010)	3,486	4,232
Income tax expense (benefit)	(903)	702	879
Net income (loss)	(1,107)	2,784	3,353
Less: Net income attributable to noncontrolling interests	314	362	231
Net income (loss) attributable to Valero Energy Corporation stockholders	\$ (1,421)	\$ 2,422	\$ 3,122
Earnings (loss) per common share	\$ (3.50)	\$ 5.84	\$ 7.30
Weighted-average common shares outstanding (in millions)	407	413	426
Earnings (loss) per common share – assuming dilution	\$ (3.50)	\$ 5.84	\$ 7.29
Weighted-average common shares outstanding – assuming dilution (in millions)	407	414	428
Supplemental information:			
(a) Includes excise taxes on sales by certain of our international operations	\$ 4,797	\$ 5,595	\$ 5,626

See Notes to Consolidated Financial Statements.

VALERO ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(millions of dollars)

	Year Ended December 31,		
	2020	2019	2018
Net income (loss)	\$ (1,107)	\$ 2,784	\$ 3,353
Other comprehensive income (loss):			
Foreign currency translation adjustment	161	349	(517)
Net gain (loss) on pension and other postretirement benefits	(80)	(234)	49
Net gain (loss) on cash flow hedges	2	(8)	—
Other comprehensive income (loss) before income tax expense (benefit)	83	107	(468)
Income tax expense (benefit) related to items of other comprehensive income (loss)	(16)	(48)	10
Other comprehensive income (loss)	99	155	(478)
Comprehensive income (loss)	(1,008)	2,939	2,875
Less: Comprehensive income attributable to noncontrolling interests	316	361	229
Comprehensive income (loss) attributable to Valero Energy Corporation stockholders	\$ (1,324)	\$ 2,578	\$ 2,646

See Notes to Consolidated Financial Statements.

VALERO ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF EQUITY
(millions of dollars)

Valero Energy Corporation Stockholders' Equity								
	Common Stock	Additional Paid-in Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Loss	Total	Non- controlling Interests	Total Equity
Balance as of December 31, 2017	\$ 7	\$ 7,039	\$ (13,315)	\$ 29,200	\$ (940)	\$ 21,991	\$ 909	\$ 22,900
Reclassification of stranded income tax effects	—	—	—	91	(91)	—	—	—
Net income	—	—	—	3,122	—	3,122	231	3,353
Dividends on common stock (\$3.20 per share)	—	—	—	(1,369)	—	(1,369)	—	(1,369)
Stock-based compensation expense	—	82	—	—	—	82	—	82
Transactions in connection with stock-based compensation plans	—	(70)	(99)	—	—	(169)	—	(169)
Open market stock purchases	—	—	(1,511)	—	—	(1,511)	—	(1,511)
Contributions from noncontrolling interests	—	—	—	—	—	—	32	32
Distributions to noncontrolling interests	—	—	—	—	—	—	(116)	(116)
Other	—	(3)	—	—	—	(3)	10	7
Other comprehensive loss	—	—	—	—	(476)	(476)	(2)	(478)
Balance as of December 31, 2018	7	7,048	(14,925)	31,044	(1,507)	21,667	1,064	22,731
Net income	—	—	—	2,422	—	2,422	362	2,784
Dividends on common stock (\$3.60 per share)	—	—	—	(1,492)	—	(1,492)	—	(1,492)
Stock-based compensation expense	—	77	—	—	—	77	—	77
Transactions in connection with stock-based compensation plans	—	(50)	30	—	—	(20)	—	(20)
Open market stock purchases	—	—	(753)	—	—	(753)	—	(753)
Acquisition of Valero Energy Partners LP (VLP) publicly held common units	—	(328)	—	—	—	(328)	(622)	(950)
Distributions to noncontrolling interests	—	—	—	—	—	—	(70)	(70)
Other	—	74	—	—	—	74	—	74
Other comprehensive income (loss)	—	—	—	—	156	156	(1)	155
Balance as of December 31, 2019	7	6,821	(15,648)	31,974	(1,351)	21,803	733	22,536
Net income (loss)	—	—	—	(1,421)	—	(1,421)	314	(1,107)
Dividends on common stock (\$3.92 per share)	—	—	—	(1,600)	—	(1,600)	—	(1,600)
Stock-based compensation expense	—	76	—	—	—	76	—	76
Transactions in connection with stock-based compensation plans	—	(83)	59	—	—	(24)	—	(24)
Open market stock purchases	—	—	(130)	—	—	(130)	—	(130)
Distributions to noncontrolling interests	—	—	—	—	—	—	(208)	(208)
Other comprehensive income	—	—	—	—	97	97	2	99
Balance as of December 31, 2020	\$ 7	\$ 6,814	\$ (15,719)	\$ 28,953	\$ (1,254)	\$ 18,801	\$ 841	\$ 19,642

See Notes to Consolidated Financial Statements.

VALERO ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(millions of dollars)

	Year Ended December 31,		
	2020	2019	2018
Cash flows from operating activities:			
Net income (loss)	\$ (1,107)	\$ 2,784	\$ 3,353
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization expense	2,351	2,255	2,069
LCM inventory valuation adjustment	(19)	—	—
Deferred income tax expense	158	234	203
Changes in current assets and current liabilities	(345)	294	(1,297)
Changes in deferred charges and credits and other operating activities, net	(90)	(36)	43
Net cash provided by operating activities	<u>948</u>	<u>5,531</u>	<u>4,371</u>
Cash flows from investing activities:			
Capital expenditures (excluding variable interest entities (VIEs))	(1,014)	(1,627)	(1,463)
Capital expenditures of VIEs:			
Diamond Green Diesel Holdings LLC (DGD)	(523)	(142)	(165)
Other VIEs	(251)	(225)	(124)
Deferred turnaround and catalyst cost expenditures (excluding VIEs)	(623)	(762)	(888)
Deferred turnaround and catalyst cost expenditures of DGD	(25)	(18)	(27)
Investments in unconsolidated joint ventures	(54)	(164)	(181)
Peru Acquisition, net of cash acquired	—	—	(468)
Acquisition of ethanol plants	—	(3)	(320)
Acquisitions of undivided interests	—	(72)	(212)
Minor acquisitions	—	—	(88)
Other investing activities, net	65	12	8
Net cash used in investing activities	<u>(2,425)</u>	<u>(3,001)</u>	<u>(3,928)</u>
Cash flows from financing activities:			
Proceeds from debt issuances and borrowings (excluding VIEs)	4,320	1,892	1,258
Proceeds from borrowings of VIEs	250	239	109
Repayments of debt and finance lease obligations (excluding VIEs)	(490)	(1,811)	(1,366)
Repayments of debt of VIEs	(5)	(6)	(6)
Purchases of common stock for treasury	(156)	(777)	(1,708)
Common stock dividend payments	(1,600)	(1,492)	(1,369)
Acquisition of VLP publicly held common units	—	(950)	—
Contributions from noncontrolling interests	—	—	32
Distributions to noncontrolling interests	(208)	(70)	(116)
Other financing activities, net	(34)	(22)	(2)
Net cash provided by (used in) financing activities	<u>2,077</u>	<u>(2,997)</u>	<u>(3,168)</u>
Effect of foreign exchange rate changes on cash	130	68	(143)
Net increase (decrease) in cash and cash equivalents	730	(399)	(2,868)
Cash and cash equivalents at beginning of year	2,583	2,982	5,850
Cash and cash equivalents at end of year	<u>\$ 3,313</u>	<u>\$ 2,583</u>	<u>\$ 2,982</u>

See Notes to Consolidated Financial Statements.



VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. DESCRIPTION OF BUSINESS, BASIS OF PRESENTATION, AND SIGNIFICANT ACCOUNTING POLICIES

Description of Business

The terms “Valero,” “we,” “our,” and “us,” as used in this report, may refer to Valero Energy Corporation, one or more of its consolidated subsidiaries, or all of them taken as a whole.

We are an international manufacturer and marketer of transportation fuels and petrochemical products. We own 15 petroleum refineries with a combined throughput capacity of approximately 3.2 million barrels per day as of December 31, 2020 that are located in the United States (U.S.), Canada, and the United Kingdom (U.K.). We are also a joint venture partner in DGD, which owns a renewable diesel plant in Norco, Louisiana with a production capacity of 290 million gallons per year as of December 31, 2020. We also own 13 ethanol plants with a combined production capacity of 1.69 billion gallons per year as of December 31, 2020 that are located in the Mid-Continent region of the U.S. We sell our products primarily in the U.S., Canada, the U.K., Ireland, and Latin America.

As discussed in Note 2, the outbreak of COVID-19 and its development into a pandemic in March 2020 has resulted in significant economic disruption globally. While demand and market prices for most of our products increased during the second half of 2020 compared to the low product demand during the first half of 2020, developments with respect to COVID-19 have been occurring at a rapid pace and the risk remains that circumstances could change. For instance, beginning in the latter part of the second quarter of 2020, certain governmental authorities in the U.S. and other countries across the world began lifting many of the restrictions put in place to slow the spread of COVID-19. However, in the second half of 2020, many locations where restrictions were lifted, and others where the restrictions were only more moderately lifted (such as California in our U.S. West Coast region, and New York, Canada, and the U.K. in our North Atlantic region), experienced a resurgence in the spread of COVID-19, which prompted many governmental authorities to reimpose certain restrictions. In December 2020, the U.S. Food and Drug Administration and Canadian and U.K. regulators each granted emergency-use authorization for multiple COVID-19 vaccines to be used as immunization against the COVID-19 virus. Although these vaccines may be seen as a key factor in helping to restore public confidence, and thus stimulate and increase economic activity, potentially to pre-pandemic levels, they may not be distributed widely on a timely basis and they may not be effective against new variants of the virus. Based on these and other circumstances that cannot be predicted, the broader implications of the pandemic on our results of operations and financial position remain uncertain. Therefore, our operating results for the year ended December 31, 2020 do not fully reflect the impact this disruption will likely continue to have on us.

Basis of Presentation

General

These consolidated financial statements were prepared in accordance with U.S. generally accepted accounting principles (GAAP) and with the rules and regulations of the U.S. Securities and Exchange Commission (SEC).

Reclassifications

Certain prior year amounts have been reclassified to conform to the 2020 presentation. The changes were due to (i) the reclassification of amounts for income taxes receivable from prepaid expenses and other to

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

“receivables, net” in the consolidated balance sheets and (ii) the reclassification of amounts for repayments of debt and finance lease obligations from “other financing activities, net” in the consolidated statements of cash flows to repayments of debt and finance lease obligations (excluding VIEs).

Significant Accounting Policies

Principles of Consolidation

These financial statements include those of Valero, our wholly owned subsidiaries, and VIEs in which we have a controlling financial interest. Our VIEs are described in Note 13. The ownership interests held by others in the VIEs are recorded as noncontrolling interests. Intercompany items and transactions have been eliminated in consolidation. Investments in less than wholly owned entities where we have significant influence are accounted for using the equity method.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates. On an ongoing basis, we review our estimates based on currently available information. Changes in facts and circumstances may result in revised estimates.

Cash Equivalents

Our cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and have a maturity of three months or less when acquired.

Receivables

Trade receivables are carried at amortized cost, which is the original invoice amount adjusted for cash collections, write-offs, and foreign exchange. We maintain an allowance for credit losses, which is adjusted based on management’s assessment of our customers’ historical collection experience, known or expected credit risks, and industry and economic conditions.

Inventories

The cost of (i) refinery feedstocks and refined petroleum products and blendstocks, (ii) renewable diesel feedstocks (i.e., rendered and recycled materials, including animal fats, used cooking oils, and other vegetable oils) and products, and (iii) ethanol feedstocks and products is determined under the last-in, first-out (LIFO) method using the dollar-value LIFO approach, with any increments valued based on average purchase prices during the year. Our LIFO inventories are carried at the lower of cost or market. The cost of products purchased for resale and the cost of materials and supplies are determined principally under the weighted-average cost method. Our non-LIFO inventories are carried at the lower of cost or net realizable value. If the aggregate market value of our LIFO inventories or the aggregate net realizable value of our non-LIFO inventories is less than the related aggregate cost, we recognize a loss for the difference in our statements of income. To the extent the aggregate market value of our LIFO inventories subsequently increases, we recognize an increase to the value of our inventories (not to exceed cost) and a gain in our statements of income.

Property, Plant, and Equipment

The cost of property, plant, and equipment (property assets) purchased or constructed, including betterments of property assets, is capitalized. However, the cost of repairs to and normal maintenance of

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

property assets is expensed as incurred. Betterments of property assets are those that extend the useful life, increase the capacity or improve the operating efficiency of the asset, or improve the safety of our operations. The cost of property assets constructed includes interest and certain overhead costs allocable to the construction activities.

Our operations are highly capital intensive. Each of our refineries and plants comprises a large base of property assets, consisting of a series of interconnected, highly integrated and interdependent crude oil and feedstock processing facilities and supporting logistical infrastructure (Units), and these Units are improved continuously. Improvements consist of the addition of new Units and betterments of existing Units. We plan for these improvements by developing a multi-year capital program that is updated and revised based on changing internal and external factors.

Depreciation of property assets used in our refining and renewable diesel segments is recorded on a straight-line basis over the estimated useful lives of these assets primarily using the composite method of depreciation. We maintain a separate composite group of property assets for each of our refineries and our renewable diesel plant. We estimate the useful life of each group based on an evaluation of the property assets comprising the group, and such evaluations consist of, but are not limited to, the physical inspection of the assets to determine their condition, consideration of the manner in which the assets are maintained, assessment of the need to replace assets, and evaluation of the manner in which improvements impact the useful life of the group. The estimated useful lives of our composite groups range primarily from 20 to 30 years.

Under the composite method of depreciation, the cost of an improvement is added to the composite group to which it relates and is depreciated over that group's estimated useful life. We design improvements to our refineries and renewable diesel plant in accordance with engineering specifications, design standards, and practices accepted in our industry, and these improvements have design lives consistent with our estimated useful lives. Therefore, we believe the use of the group life to depreciate the cost of improvements made to the group is reasonable because the estimated useful life of each improvement is consistent with that of the group.

Also under the composite method of depreciation, the historical cost of a minor property asset (net of salvage value) that is retired or replaced is charged to accumulated depreciation and no gain or loss is recognized in income. However, a gain or loss is recognized in income for a major property asset that is retired, replaced, sold, or for an abnormal disposition of a property asset (primarily involuntary conversions). Gains and losses are reflected in depreciation and amortization expense, unless such amounts are reported separately due to materiality.

Depreciation of property assets used in our ethanol segment is recorded on a straight-line basis over the estimated useful lives of the related assets. The estimated useful life of our corn processing facilities is 20 years.

Leasehold improvements are amortized on a straight-line basis over the shorter of the lease term or the estimated useful life of the related asset. Finance lease ROU (defined below) assets are amortized as discussed in "Leases" below.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Deferred Charges and Other Assets

“Deferred charges and other assets, net” primarily include the following:

- turnaround costs, which are incurred in connection with planned major maintenance activities at our refineries, renewable diesel plant, and ethanol plants, are deferred when incurred and amortized on a straight-line basis over the period of time estimated to lapse until the next turnaround occurs;
- fixed-bed catalyst costs, representing the cost of catalyst that is changed out at periodic intervals when the quality of the catalyst has deteriorated beyond its prescribed function, are deferred when incurred and amortized on a straight-line basis over the estimated useful life of the specific catalyst;
- operating lease ROU (defined below) assets, which are amortized as discussed in “Leases” below;
- investments in unconsolidated joint ventures;
- noncurrent income taxes receivable;
- intangible assets, which are amortized over their estimated useful lives; and
- goodwill.

Leases

We evaluate if a contract is or contains a lease at inception of the contract. If we determine that a contract is or contains a lease, we recognize a right-of-use (ROU) asset and lease liability at the commencement date of the lease based on the present value of lease payments over the lease term. The present value of the lease payments is determined by using the implicit rate when readily determinable. If not determinable, our centrally managed treasury group provides an incremental borrowing rate based on quoted interest rates obtained from financial institutions. The rate used is for a term similar to the duration of the lease based on information available at the commencement date. Lease terms include options to extend or terminate the lease when it is reasonably certain that we will exercise those options.

We recognize ROU assets and lease liabilities for leasing arrangements with terms greater than one year. Except for the marine transportation asset class, we account for lease and non-lease components in a contract as a single lease component for all classes of underlying assets. Our marine transportation contracts include non-lease components, such as maintenance and crew costs. We allocate the consideration in these contracts based on pricing information provided by the third-party broker.

Expense for an operating lease is recognized as a single lease cost on a straight-line basis over the lease term and is reflected in the appropriate income statement line item based on the leased asset’s function. Amortization expense of a finance lease ROU asset is recognized on a straight-line basis over the lesser of the useful life of the leased asset or the lease term. However, if the lessor transfers ownership of the finance lease ROU asset to us at the end of the lease term, the finance lease ROU asset is amortized over the useful life of the leased asset. Amortization expense is reflected in “depreciation and amortization

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

expense.” Interest expense is incurred based on the carrying value of the lease liability and is reflected in “interest and debt expense, net of capitalized interest.”

Impairment of Assets

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. 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.

We evaluate our equity method investments for impairment when there is evidence that we may not be able to recover the carrying amount of our investments or the investee is unable to sustain an earnings capacity that justifies the carrying amount. A loss in the value of an investment that is other than a temporary decline is recognized currently in income based on the difference between the estimated current fair value of the investment and its carrying amount.

Goodwill is not amortized, but is tested for impairment annually on October 1st and in interim periods when events or changes in circumstance indicate that the fair value of a reporting unit with goodwill is below its carrying amount. A goodwill impairment loss is recognized for the amount that the carrying amount of a reporting unit, including goodwill, exceeds its fair value, limited to the total amount of goodwill allocated to that reporting unit.

Asset Retirement Obligations

We record a liability, which is referred to as an asset retirement obligation, at fair value for the estimated cost to retire a tangible long-lived asset at the time we incur that liability, which is generally when the asset is purchased, constructed, or leased. We record the liability when we have a legal 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, we record the liability when sufficient information is available to estimate the liability’s fair value.

We have obligations with respect to certain of our assets related to our refining and ethanol segments to clean and/or dispose of various component parts of the assets at the time they are retired. However, these component parts can be used for extended and indeterminate periods of time as long as they are properly maintained and/or upgraded. It is our practice and current intent to maintain all our assets and continue making improvements to those assets based on technological advances. As a result, we believe that our assets related to our refining and ethanol segments have indeterminate lives for purposes of estimating asset retirement obligations because dates or ranges of dates upon which we would retire such assets cannot reasonably be estimated at this time. We will recognize a liability at such time when sufficient information exists to estimate a date or range of potential settlement dates that is needed to employ a present value technique to estimate fair value.

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

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

commitment to a formal plan of action. Amounts recorded for environmental liabilities have not been reduced by possible recoveries from third parties and have not been measured on a discounted basis.

Legal Contingencies

We are subject to legal proceedings, claims, and liabilities that arise in the ordinary course of business. We accrue losses associated with legal claims when such losses are probable and reasonably estimable. If we determine that a loss is probable and cannot estimate a specific amount for that loss but can estimate a range of loss, the best estimate within the range is accrued. If no amount within the range is a better estimate than any other, the minimum amount of the range is accrued. Estimates are adjusted as additional information becomes available or circumstances change. Legal defense costs associated with loss contingencies are expensed in the period incurred.

Foreign Currency Translation

Generally, our international subsidiaries use their local currency as their functional currency. Balance sheet amounts are translated into U.S. dollars using exchange rates in effect as of the balance sheet date. Income statement amounts are translated into U.S. dollars using the exchange rates in effect at the time the underlying transactions occur. Foreign currency translation adjustments are recorded as a component of accumulated other comprehensive loss.

Revenue Recognition

Our revenues are primarily generated from contracts with customers. We generate revenue from contracts with customers from the sale of products by our refining, renewable diesel, and ethanol segments. Revenues are recognized when we satisfy our performance obligation to transfer products to our customers, which typically occurs at a point in time upon shipment or delivery of the products, and for an amount that reflects the transaction price that is allocated to the performance obligation.

The customer is able to direct the use of, and obtain substantially all of the benefits from, the products at the point of shipment or delivery. As a result, we consider control to have transferred upon shipment or delivery because we have a present right to payment at that time, the customer has legal title to the asset, we have transferred physical possession of the asset, and the customer has significant risks and rewards of ownership of the asset.

Our contracts with customers state the final terms of the sale, including the description, quantity, and price for goods sold. Payment is typically due in full within two to ten days of delivery. In the normal course of business, we generally do not accept product returns.

The transaction price is the consideration that we expect to be entitled to in exchange for our products. The transaction price for substantially all of our contracts is generally based on commodity market pricing (i.e., variable consideration). As such, this market pricing may be constrained (i.e., not estimable) at the inception of the contract but will be recognized based on the applicable market pricing, which will be known upon transfer of the goods to the customer. Some of our contracts also contain variable consideration in the form of sales incentives to our customers, such as discounts and rebates. For contracts that include variable consideration, we estimate the factors that determine the variable consideration in order to establish the transaction price.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

We have elected to exclude from the measurement of the transaction price all taxes assessed by governmental authorities that are both imposed on and concurrent with a specific revenue-producing transaction and collected by us from a customer (e.g., sales tax, use tax, value-added tax, etc.). We continue to include in the transaction price excise taxes that are imposed on certain inventories in our international operations. The amount of such taxes is provided in supplemental information in a footnote on the statements of income.

There are instances where we provide shipping services in relation to the goods sold to our customer. Shipping and handling costs that occur before the customer obtains control of the goods are deemed to be fulfillment activities and are included in cost of materials and other. We have elected to account for shipping and handling activities that occur after the customer has obtained control of a good as fulfillment activities rather than as a promised service and we have included these activities in cost of materials and other.

We enter into certain purchase and sale arrangements with the same counterparty that are deemed to be made in contemplation of one another. We combine these transactions and present the net effect in cost of materials and other. We also enter into refined petroleum product exchange transactions to fulfill sales contracts with our customers by accessing refined petroleum products in markets where we do not operate our own refineries. These refined petroleum product exchanges are accounted for as exchanges of nonmonetary assets, and no revenues are recorded on these transactions.

Cost Classifications

“Cost of materials and other” primarily includes the cost of materials that are a component of our products sold. These costs include (i) the direct cost of materials (such as crude oil and other refinery feedstocks, refined petroleum products and blendstocks, renewable diesel feedstocks and products, and ethanol feedstocks and products) that are a component of our products sold; (ii) costs related to the delivery (such as shipping and handling costs) of products sold; (iii) costs related to our environmental credit obligations to comply with various governmental and regulatory programs (such as the cost of Renewable Identification Numbers (RINs) as required by the U.S. Environmental Protection Agency’s (EPA) Renewable Fuel Standard, emission credits under various cap-and-trade systems, as defined in Note 20); (iv) the blender’s tax credit recognized on qualified biodiesel mixtures; (v) gains and losses on our commodity derivative instruments; and (vi) certain excise taxes.

“Operating expenses (excluding depreciation and amortization expense)” include costs to operate our refineries, renewable diesel and ethanol plants, and logistics assets, except for depreciation and amortization expense. These costs primarily include employee-related expenses, energy and utility costs, catalysts and chemical costs, and repair and maintenance expenses.

“Depreciation and amortization expense” associated with our operations is separately presented in our statement of income as a component of cost of sales and general and administrative expenses and is disclosed by reportable segment in Note 18.

“Other operating expenses” include costs, if any, incurred by our reportable segments that are not associated with our cost of sales.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Environmental Compliance Program Costs

We purchase credits in the open market to meet our obligations under various environmental compliance programs. We purchase biofuel credits (primarily RINs in the U.S.) to comply with government regulations that require us to blend a certain percentage of biofuels into the products we produce. To the degree that we are unable to blend biofuels at the required percentage, we must purchase biofuel credits to meet our obligation. We purchase greenhouse gas (GHG) emission credits to comply with government regulations concerning various GHG emission programs, including cap-and-trade systems. These programs are described in Note 21 under “*Risk Management Activities by Type of Risk—Environmental Compliance Program Price Risk.*”

The costs of purchased biofuel credits and GHG emission credits are charged to cost of materials and other as such credits are needed to satisfy our obligation. To the extent we have not purchased enough credits to satisfy our obligation as of the balance sheet date, we charge cost of materials and other for such deficiency based on the market price of the credits as of the balance sheet date, and we record a liability for our obligation to purchase those credits. See Note 20 for disclosure of our fair value liability.

Stock-Based Compensation

Compensation expense for our share-based compensation plans is based on the fair value of the awards granted and is recognized in income on a straight-line basis over the shorter of (i) the requisite service period of each award or (ii) the period from the grant date to the date retirement eligibility is achieved if that date is expected to occur during the vesting period established in the award.

Income Taxes

Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred amounts are measured using enacted tax rates expected to apply to taxable income in the year those temporary differences are expected to be recovered or settled. Deferred tax assets are reduced by unrecognized tax benefits, if such items may be available to offset the unrecognized tax benefit. Stranded income tax effects are released from accumulated other comprehensive loss to retained earnings on an individual item basis as those items are reclassified into income.

We have elected to classify any interest expense and penalties related to the underpayment of income taxes in income tax expense.

We have elected to treat the global intangible low-taxed income (GILTI) tax as a period expense.

Earnings per Common Share

Earnings per common share is computed by dividing net income attributable to Valero stockholders by the weighted-average number of common shares outstanding for the year. Participating securities are included in the computation of basic earnings per share using the two-class method. Earnings per common share – assuming dilution is computed by dividing net income attributable to Valero stockholders by the weighted-average number of common shares outstanding for the year increased by the effect of dilutive securities. Potentially dilutive securities are excluded from the computation of earnings per common share – assuming dilution when the effect of including such shares would be antidilutive.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Financial Instruments

Our financial instruments include cash and cash equivalents, receivables, payables, debt, operating and finance lease obligations, commodity derivative contracts, and foreign currency derivative contracts. The estimated fair values of these financial instruments approximate their carrying amounts, except for certain debt as discussed in Note 20.

Derivatives and Hedging

All derivative instruments, not designated as normal purchases or sales, are recorded in the balance sheet as either assets or liabilities measured at their fair values with changes in fair value recognized currently in income. To manage commodity price risk, we primarily use cash flow hedges and economic hedges, and we also use fair value hedges from time to time. The cash flow effects of all of our derivative instruments are reflected in operating activities in the consolidated statements of cash flows.

Accounting Pronouncements Adopted During 2020

We adopted the following Financial Accounting Standards Board (FASB) Accounting Standards Updates (ASUs) on January 1, 2020. Our adoption of these ASUs did not have a material impact on our financial statements or related disclosures.

ASU	Basis of Adoption
2016-13 Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments (including codification improvements in ASUs 2018-19 and 2019-11 and ASU 2020-02—Financial Instruments—Credit Losses (Topic 326): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 119)	Cumulative effect
2018-15 Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract	Prospectively
2019-12 Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes	Prospectively

The following FASB ASU was issued and adopted by us on March 12, 2020. Our adoption of this ASU did not have a material impact on our financial statements or related disclosures.

ASU	Basis of Adoption
2020-04 Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting	Prospectively

Accounting Pronouncement Adopted During January 2021

The following FASB ASU was issued and adopted by us on January 7, 2021. Our adoption of this ASU did not have a material impact on our financial statements or related disclosures.

ASU	Basis of Adoption
2021-01 Reference Rate Reform (Topic 848): Scope	Prospectively

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. UNCERTAINTIES AND CERTAIN SIGNIFICANT ACCOUNTING ESTIMATES

Overview

The outbreak of COVID-19 and its development into a pandemic in March 2020 and certain developments in the global oil markets have impacted and continue to impact our business. We have responded in multiple ways to the impacts from these matters on our business, and we will strive to continue to respond to these impacts. During the early months of the pandemic, we reduced the amount of crude oil processed at most of our refineries in response to the decreased demand for our products, we temporarily idled various gasoline-making units at certain of our refineries to further limit gasoline production, and we took measures to reduce jet fuel production. We also temporarily idled eight of our ethanol plants and reduced production at our remaining ethanol plants, in each case in order to address the decreased demand for ethanol. We have since increased the production to align with increasing demand, and we restarted the gasoline-making units and most of the ethanol plants that had been temporarily idled. Demand for our products taken as a whole, however, has not returned to pre-pandemic levels, and as of December 31, 2020, our refineries and plants are operating to meet current product demand.

Many uncertainties remain with respect to the COVID-19 pandemic, including its resulting economic effects, and we are unable to predict the ultimate economic impacts from the pandemic on our business and how quickly national economies can recover once the pandemic subsides, the timing or effectiveness of vaccine distributions, or whether any recovery will ultimately experience a reversal or other setbacks. However, the adverse impacts of the economic effects on our business have been and will likely continue to be significant. We believe we have proactively addressed many of the known impacts of the pandemic to the extent possible and we will strive to continue to do so, but there can be no assurance that any measures we have taken or may take will be fully effective. As a result, we expect these matters may affect our estimates and assumptions on amounts reported in the financial statements and accompanying notes in the near term.

Impairment Analysis of Long-Lived Assets

Due to the adverse economic conditions discussed above, we reviewed our significant operating assets for the existence of impairment indicators during the year ended December 31, 2020. As a result, we reduced the estimated useful life of the ethanol plant in Riga, Michigan in September 2020 and evaluated six other ethanol plants and one refinery for potential impairment as of December 31, 2020, considering current economic conditions on our future estimated cash flows. Based on our analysis, we determined that the carrying amount of these assets was recoverable, as the undiscounted future cash flows from each asset exceeded its respective carrying value. The impact from the reduction in estimated useful life of the Riga, Michigan ethanol plant did not have a material impact on our results of operations or financial position; however, this plant ceased operations in 2020. We will continue to evaluate the economic conditions and their impact on our assumptions.

Impairment Analysis of Goodwill

We have \$260 million of goodwill as of December 31, 2020. All of our goodwill is allocated to one reporting unit, the U.S. Gulf Coast refining region. Our annual test for the impairment of goodwill is performed on October 1 of each year. However, as discussed above, there were adverse changes in the capital and commodity markets that contributed to a significant decline in our common stock price compared to the price as of December 31, 2019 and early March 2020. Despite the decline in our common

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

stock price, we determined our goodwill was not impaired as of October 1 and December 31, 2020. Nonetheless, we will continue to evaluate the economic conditions and their impact on our assumptions.

Inventory Valuation

See Note 5 regarding the estimates used to determine the market value of our inventories, as well as the recognition of a liquidation of LIFO inventory layers.

3. MERGER AND ACQUISITIONS

Merger with VLP

On January 10, 2019, we completed our acquisition of all of the outstanding publicly held common units of VLP pursuant to a definitive Agreement and Plan of Merger (Merger Agreement, and together with the transactions contemplated thereby, the Merger Transaction) with VLP. Upon completion of the Merger Transaction, each outstanding publicly held common unit was converted into the right to receive \$42.25 per common unit in cash without any interest thereon, and all such publicly traded common units were automatically canceled and ceased to exist. Upon completion of the Merger Transaction, we paid aggregate merger consideration of \$950 million, which was funded with available cash on hand.

Prior to the completion of the Merger Transaction, we consolidated the financial statements of VLP and reflected noncontrolling interests on our balance sheet for the portion of VLP's partners' capital held by VLP's public common unitholders. Upon completion of the Merger Transaction, VLP became our indirect wholly owned subsidiary and, as a result, we no longer reflect noncontrolling interests on our balance sheet with respect to VLP. In addition, we no longer attribute a portion of VLP's net income to noncontrolling interests. Because we had a controlling financial interest in VLP before the Merger Transaction and retained our controlling financial interest in VLP after the Merger Transaction, the change in our ownership interest in VLP as a result of the merger was accounted for as an equity transaction. Accordingly, we did not recognize a gain or loss on the Merger Transaction.

Acquisition of Ethanol Plants

On November 15, 2018, we acquired three ethanol plants from two subsidiaries of Green Plains Inc. located in Bluffton, Indiana; Lakota, Iowa; and Riga, Michigan with a combined ethanol production capacity of 280 million gallons per year for total cash consideration of \$320 million including working capital of \$20 million. This acquisition was accounted for as an asset acquisition. Our Riga, Michigan ethanol plant ceased operations in 2020.

Peru Acquisition

On May 14, 2018, we acquired 100 percent of the issued and outstanding equity interests in Pure Biofuels del Peru S.A.C. (now known as Valero Peru S.A.C.) (Valero Peru) from Pegasus Capital Advisors L.P. and various minority equity holders. Valero Peru markets refined petroleum products through its logistics assets in Peru. Valero Peru owns a terminal at the Port of Callao, near Lima, with approximately 1 million barrels of storage capacity for refined petroleum and renewable products. Through one of its subsidiaries, Valero Peru also owns a 180,000-barrel storage terminal in Paita, in Northern Peru, which is scheduled to commence operations in the first quarter of 2021, pending regulatory approvals. This acquisition, which is referred to as the Peru Acquisition, was consistent with our general business strategy and broadens the geographic diversity of our refining segment. This acquisition was accounted for as a business combination.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table summarizes the fair values of the assets acquired and liabilities assumed at the acquisition date, based on an independent appraisal that was completed in the fourth quarter of 2018 (in millions). We paid \$468 million from available cash on hand, of which \$132 million was for working capital. During the third and fourth quarters of 2018, we recognized immaterial adjustments to the preliminary amounts recorded for the Peru Acquisition with a corresponding adjustment to goodwill due to the completion of the independent appraisal. These adjustments did not have a material effect on our results of operations for the year ended December 31, 2018.

Current assets, net of cash acquired	\$	158
Property, plant, and equipment		102
Deferred charges and other assets		466
Current liabilities, excluding current portion of debt		(26)
Debt assumed, including current portion		(137)
Deferred income tax liabilities		(62)
Other long-term liabilities		(27)
Noncontrolling interest		(6)
Total consideration, net of cash acquired	\$	<u>468</u>

Deferred charges and other assets primarily include identifiable intangible assets of \$200 million and goodwill of \$260 million. Identifiable intangible assets, which consist of customer contracts and relationships, are amortized on a straight-line basis over ten years. Goodwill is calculated as the excess of the consideration transferred over the estimated fair values of the underlying tangible and identifiable intangible assets acquired and liabilities assumed. Goodwill represents the future economic benefits expected to be recognized from our expansion into the Latin American refined petroleum products markets arising from other assets acquired that were not individually identified and separately recognized. We determined that the entire balance of goodwill is related to the refining segment. None of the goodwill is deductible for tax purposes.

Our statements of income include the results of operations of Valero Peru since the date of acquisition, and such results are reflected in the refining segment and allocated to one reporting unit, the U.S. Gulf Coast refining region. Results of operations since the date of acquisition, supplemental pro forma financial information, and acquisition-related costs have not been presented for the Peru Acquisition as such information is not material to our results of operations.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

4. RECEIVABLES

Receivables consisted of the following (in millions):

	December 31,	
	2020	2019
Receivables from contracts with customers	\$ 3,642	\$ 5,610
Receivables from certain purchase and sale arrangements	1,212	2,484
Receivables before allowance for credit losses	4,854	8,094
Allowance for credit losses	(47)	(36)
Receivables after allowance for credit losses	4,807	8,058
Income taxes receivable	1,024	84
Other receivables	278	846
Receivables, net	<u>\$ 6,109</u>	<u>\$ 8,988</u>

The increase to our income taxes receivable relates to the income tax benefit recorded during the year ended December 31, 2020 as described in Note 16.

There were no significant changes in our allowance for credit losses during the years ended December 31, 2020, 2019, and 2018.

5. INVENTORIES

Inventories consisted of the following (in millions):

	December 31,	
	2020	2019
Refinery feedstocks	\$ 1,979	\$ 2,399
Refined petroleum products and blendstocks	3,425	4,034
Renewable diesel feedstocks and products	50	46
Ethanol feedstocks and products	297	260
Materials and supplies	287	274
Inventories	<u>\$ 6,038</u>	<u>\$ 7,013</u>

We compare the market value of inventories to their cost on an aggregate basis, excluding materials and supplies. In determining the market value of our inventories, we assume that feedstocks are converted into refined products, which requires us to make estimates regarding the refined products expected to be produced from those feedstocks and the conversion costs required to convert those feedstocks into refined products. We also estimate the usual and customary transportation costs required to move the inventory from our plants to the appropriate points of sale. We then apply an estimated selling price to our inventories. If the aggregate market value is less than the aggregate cost, we recognize a loss for the difference in our statements of income. To the extent the aggregate market value of our LIFO inventories

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

subsequently increases, we recognize an increase to the value of our inventories (not to exceed cost) and a gain in our statements of income.

The market value of our LIFO inventory fell below their LIFO inventory carrying amounts as of March 31, 2020, and as a result, we recorded an LCM inventory valuation reserve of \$2.5 billion in order to state our inventories at market. As of September 30, 2020, we reevaluated our inventories and determined that our cost was lower than market. As a result, our LCM inventory valuation reserve was fully reversed as of September 30, 2020. The change in our LCM inventory valuation reserve resulted in a net benefit of \$19 million for the year ended December 31, 2020 due to the foreign currency translation effect of the portion of the LCM inventory valuation adjustment attributable to our international operations. As of December 31, 2020 and 2019, the replacement cost (market value) of LIFO inventories exceeded their LIFO carrying amounts by \$1.3 billion and \$2.5 billion, respectively.

During the year ended December 31, 2020, we had a liquidation of LIFO inventory layers that increased cost of materials and other by \$224 million. Our LIFO inventory levels decreased during the year ended December 31, 2020 due to lower production resulting from lower demand for our products caused by the negative economic impacts of the COVID-19 pandemic on our business.

Our non-LIFO inventories accounted for \$918 million and \$1.4 billion of our total inventories as of December 31, 2020 and 2019, respectively.

6. LEASES

General

We have entered into long-term leasing arrangements for the right to use various classes of underlying assets as follows:

- *Pipelines, Terminals, and Tanks* includes facilities and equipment used in the storage, transportation, production, and sale of refinery feedstock, refined petroleum product, ethanol, and corn inventories;
- *Marine Transportation* includes time charters for ocean-going tankers and coastal vessels;
- *Rail Transportation* includes railcars and related storage facilities;
- *Feedstock Processing Equipment* includes machinery, equipment, and various facilities used in our refining, renewable diesel, and ethanol operations;
- *Energy and Gases* includes facilities and equipment related to industrial gases and power used in our operations;
- *Real Estate* includes land and rights-of-way associated with our refineries, plants, and pipelines and other logistics assets, as well as office facilities; and
- *Other* includes equipment primarily used at our corporate offices, such as printers and copiers.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In addition to fixed lease payments, some arrangements contain provisions for variable lease payments. Certain leases for pipelines, terminals, and tanks provide for variable lease payments based on, among other things, throughput volumes in excess of a base amount. Certain marine transportation leases contain provisions for payments that are contingent on usage. Additionally, if the rental increases are not scheduled in the lease, such as an increase based on subsequent changes in the index or rate, those rents are considered variable lease payments. In all instances, variable lease payments are recognized in the period in which the obligation for those payments is incurred.

Lease Costs and Other Supplemental Information

In accordance with FASB Accounting Standards Codification (ASC) Topic 842, “Leases,” (Topic 842), our total lease cost comprises costs that are included in our income statement, as well as costs capitalized as part of an item of property, plant, and equipment or inventory. Total lease cost by class of underlying asset was as follows (in millions):

	Pipelines, Terminals, and Tanks	Transportation		Feedstock Processing Equipment	Energy and Gases	Real Estate	Other	Total
		Marine	Rail					
Year ended December 31, 2020								
Finance lease cost:								
Amortization of ROU assets	\$ 109	\$ —	\$ 2	\$ 13	\$ 4	\$ —	\$ —	\$ 128
Interest on lease liabilities	92	—	—	3	3	—	—	98
Operating lease cost	165	156	61	15	7	26	4	434
Variable lease cost	53	40	1	3	—	2	—	99
Short-term lease cost	9	45	—	37	—	—	—	91
Sublease income	—	(10)	—	—	—	(2)	—	(12)
Total lease cost	\$ 428	\$ 231	\$ 64	\$ 71	\$ 14	\$ 26	\$ 4	\$ 838
Year ended December 31, 2019								
Finance lease cost:								
Amortization of ROU assets	\$ 44	\$ —	\$ —	\$ 7	\$ 3	\$ —	\$ —	\$ 54
Interest on lease liabilities	47	—	—	1	2	—	—	50
Operating lease cost	182	145	52	20	9	27	4	439
Variable lease cost	66	35	—	1	—	1	—	103
Short-term lease cost	9	53	—	29	—	—	—	91
Sublease income	—	(27)	—	—	—	(3)	—	(30)
Total lease cost	\$ 348	\$ 206	\$ 52	\$ 58	\$ 14	\$ 25	\$ 4	\$ 707

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In accordance with FASB ASC Topic 840, “Leases,” which was superseded by Topic 842, “rental expense, net of sublease rental income” for the year ended December 31, 2018 was as follows (in millions):

Minimum rental expense	\$	515
Contingent rental expense		19
Total rental expense		534
Less: Sublease rental income		31
Rental expense, net of sublease rental income	\$	503

The following table presents additional information related to our operating and finance leases (in millions, except for lease terms and discount rates):

	December 31, 2020		December 31, 2019	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
Supplemental balance sheet information				
ROU assets, net reflected in the following balance sheet line items:				
Property, plant, and equipment, net	\$ —	\$ 1,622	\$ —	\$ 790
Deferred charges and other assets, net	1,204	—	1,329	—
Total ROU assets, net	\$ 1,204	\$ 1,622	\$ 1,329	\$ 790
Current lease liabilities reflected in the following balance sheet line items:				
Current portion of debt and finance lease obligations	\$ —	\$ 120	\$ —	\$ 41
Accrued expenses	285	—	331	—
Noncurrent lease liabilities reflected in the following balance sheet line items:				
Debt and finance lease obligations, less current portion	—	1,544	—	750
Other long-term liabilities	885	—	959	—
Total lease liabilities	\$ 1,170	\$ 1,664	\$ 1,290	\$ 791
Other supplemental information				
Weighted-average remaining lease term	7.6 years	14.5 years	7.7 years	19.7 years
Weighted-average discount rate	4.7 %	4.1 %	4.9 %	5.2 %

Supplemental cash flow information related to our operating and finance leases is presented in Note 19.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

MVP Terminal Finance Lease

We have a 50 percent membership interest in MVP Terminalling, LLC (MVP), an unconsolidated joint venture formed in September 2017 with a subsidiary of Magellan Midstream Partners LP (Magellan). MVP owns and operates a marine terminal (the MVP Terminal) located adjacent to the Houston Ship Channel in Pasadena, Texas. Concurrent with the formation of MVP, we entered into a terminaling agreement with MVP to utilize the MVP Terminal upon completion of construction of the terminal, which occurred in the first quarter of 2020. During the three months ended March 31, 2020, we recognized a finance lease ROU asset and related liability of approximately \$1.4 billion in connection with this agreement. The lease term included the initial term of 12 years and renewal option periods. In the fourth quarter of 2020, we evaluated our strategy with regard to certain of our logistics investments, including MVP. As a result of this review, we formally notified MVP that we do not intend to renew the terminaling agreement after its initial noncancelable term. Consequently, we reassessed the lease term and remeasured the finance lease liability based on the shortened lease term. We derecognized approximately \$600 million of the finance lease liability and related ROU asset, which are noncash financing and investing activities, respectively. As of December 31, 2020, the total lease liability was approximately \$800 million.

Maturity Analysis

The remaining minimum lease payments due under our long-term leases were as follows (in millions):

	December 31, 2020		December 31, 2019	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
2020	n/a	n/a	\$ 376	\$ 88
2021	\$ 324	\$ 187	250	86
2022	231	182	194	87
2023	194	187	160	91
2024	155	178	125	82
2025	107	178	n/a	n/a
Thereafter	435	1,498	498	1,011
Total undiscounted lease payments	1,446	2,410	1,603	1,445
Less: Amount associated with discounting	276	746	313	654
Total lease liabilities	\$ 1,170	\$ 1,664	\$ 1,290	\$ 791

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

7. PROPERTY, PLANT, AND EQUIPMENT

Major classes of property, plant, and equipment, including assets held under finance leases, consisted of the following (in millions):

	December 31,	
	2020	2019
Land	\$ 485	\$ 476
Crude oil processing facilities	32,246	31,419
Transportation and terminaling facilities	5,290	5,179
Rendered and recycled materials processing facilities	631	628
Corn processing facilities	1,212	1,201
Administrative buildings	1,038	1,015
Finance lease ROU assets (see Note 6)	1,902	944
Other	1,764	1,701
Construction in progress	2,399	1,731
Property, plant, and equipment, at cost	46,967	44,294
Accumulated depreciation	(16,578)	(15,030)
Property, plant, and equipment, net	<u>\$ 30,389</u>	<u>\$ 29,264</u>

As described in Note 6, our finance lease ROU assets arise from leasing arrangements for the right to use various classes of underlying assets including (i) pipelines, terminals, and tanks, (ii) marine and rail transportation, and (iii) feedstock processing equipment. Accumulated amortization of finance lease ROU assets was \$280 million and \$155 million as of December 31, 2020 and 2019, respectively.

Depreciation expense for the years ended December 31, 2020, 2019, and 2018 was \$1.6 billion, \$1.5 billion, and \$1.4 billion, respectively.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. DEFERRED CHARGES AND OTHER ASSETS

“Deferred charges and other assets, net” consisted of the following (in millions):

	December 31,	
	2020	2019
Deferred turnaround and catalyst costs, net	\$ 1,703	\$ 1,778
Operating lease ROU assets, net (see Note 6)	1,204	1,329
Investments in unconsolidated joint ventures	972	942
Income taxes receivable	589	525
Intangible assets, net	248	283
Goodwill	260	260
Other	565	514
Deferred charges and other assets, net	<u>\$ 5,541</u>	<u>\$ 5,631</u>

Amortization expense for deferred turnaround and catalyst costs and intangible assets was \$748 million, \$759 million, and \$668 million for the years ended December 31, 2020, 2019, and 2018, respectively.

9. ACCRUED EXPENSES AND OTHER LONG-TERM LIABILITIES

Accrued expenses and other long-term liabilities consisted of the following (in millions):

	Accrued Expenses		Other Long-Term Liabilities	
	December 31,		December 31,	
	2020	2019	2020	2019
Operating lease liabilities (see Note 6)	\$ 285	\$ 331	\$ 885	\$ 959
Liability for unrecognized tax benefits (see Note 16)	—	—	859	954
Defined benefit plan liabilities (see Note 14)	45	37	878	834
Repatriation tax liability (see Note 16) (a)	—	—	422	508
Environmental liabilities	59	27	272	319
Wage and other employee-related liabilities	210	292	124	121
Accrued interest expense	99	83	—	—
Contract liabilities from contracts with customers (see Note 18)	56	55	—	—
Environmental credit obligations (see Note 20)	159	31	—	—
Other accrued liabilities	81	93	180	192
Accrued expenses and other long-term liabilities	<u>\$ 994</u>	<u>\$ 949</u>	<u>\$ 3,620</u>	<u>\$ 3,887</u>

(a) The current portion of repatriation tax liability is included in income taxes payable and was \$54 million as of December 31, 2020 and 2019.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. DEBT AND FINANCE LEASE OBLIGATIONS

Debt, at stated values, and finance lease obligations consisted of the following (in millions):

	Final Maturity	December 31,	
		2020	2019
Credit facilities:			
Valero Revolver	2024	\$ —	\$ —
364-day Revolving Credit Facility	2021	—	—
IEnova Revolver	2028	598	348
Canadian Revolver	2021	—	—
Accounts receivable sales facility	2021	—	100
Public debt:			
Valero Senior Notes			
6.625%	2037	1,500	1,500
3.4%	2026	1,250	1,250
2.85%	2025	1,050	—
4.0%	2029	1,000	1,000
1.2%	2024	925	—
2.7%	2023	850	—
4.35%	2028	750	750
7.5%	2032	750	750
4.9%	2045	650	650
3.65%	2025	600	600
2.15%	2027	600	—
Floating Rate Notes at 1.3665%	2023	575	—
10.5%	2039	250	250
8.75%	2030	200	200
7.45%	2097	100	100
6.75%	2037	24	24
VLP Senior Notes			
4.375%	2026	500	500
4.5%	2028	500	500
Gulf Opportunity Zone Revenue Bonds, Series 2010, 4.0%	2040	300	300
Debenture, 7.65%	2026	100	100
Other debt	Various	31	47
Net unamortized debt issuance costs and other		(90)	(88)
Total debt		13,013	8,881
Finance lease obligations (see Note 6)		1,664	791
Total debt and finance lease obligations		14,677	9,672
Less: Current portion		723	494
Debt and finance lease obligations, less current portion		\$ 13,954	\$ 9,178

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Credit Facilities

Valero Revolver

We have a revolving credit facility (the Valero Revolver) with a borrowing capacity of \$4 billion that matures in March 2024. The Valero Revolver also provides for the issuance of letters of credit of up to \$2.4 billion.

Outstanding borrowings under the Valero Revolver bear interest, at our option, at either (i) the adjusted LIBO rate (as defined in the Valero Revolver) for the applicable interest period in effect from time to time plus the applicable margin or (ii) the alternate base rate (as defined in the Valero Revolver) plus the applicable margin. The Valero Revolver also requires payments for customary fees, including facility fees, letter of credit participation fees, and administrative agent fees. The interest rate and facility fees under the Valero Revolver are subject to adjustment based upon the credit ratings assigned to our senior unsecured debt.

We had no borrowings or repayments under the Valero Revolver during the years ended December 31, 2020, 2019, and 2018.

364-day Revolving Credit Facility

In April 2020, we entered into an \$875 million 364-Day Credit Agreement (the 364-day Revolving Credit Facility) with several lenders. This facility provides for a revolving credit facility in an aggregate principal amount of up to \$875 million and matures 364 days from April 13, 2020.

Borrowings under this facility bear interest at the base rate or the eurodollar rate (at our election) plus an applicable rate ranging from 0.150 percent to 1.700 percent, based upon the elected interest rate type and our debt ratings from certain rating agencies. The facility requires us to pay a commitment fee accruing on the daily amount of used and unused commitments of the lenders, which is also based upon our debt ratings mentioned above. The interest and commitment fees under this facility are payable quarterly. The facility also requires us to pay a customary agency fee to the administrative agent. The facility contains various customary covenants and events of default.

IEnova Revolver

Central Mexico Terminals (as described in Note 13) has a combined unsecured revolving credit facility (IEnova Revolver) with IEnova (defined in Note 13) that matures in February 2028. In November 2019, the borrowing capacity under the IEnova Revolver was increased from \$340 million to \$491 million, and during the year ended December 31, 2020, it was increased to \$660 million. IEnova may terminate this revolver at any time and demand repayment of all outstanding amounts; therefore, all outstanding borrowings are reflected in current portion of debt. The IEnova Revolver is available only to the operations of Central Mexico Terminals, and the creditors of Central Mexico Terminals do not have recourse against us.

Outstanding borrowings under this revolver bear interest at the three-month LIBO rate for the applicable interest period in effect from time to time plus the applicable margin. The interest rate under this revolver is subject to adjustment, with agreement by both parties, based upon changes in market conditions. As of December 31, 2020 and 2019, the variable rate was 3.870 percent and 5.749 percent, respectively.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

During the years ended December 31, 2020, 2019, and 2018 Central Mexico Terminals borrowed \$250 million, \$239 million, and \$109 million, respectively, and had no repayments under this revolver.

Canadian Revolver

In November 2020, one of our Canadian subsidiaries amended its committed revolving credit facility (the Canadian Revolver) of C\$150 million to extend the maturity date from November 2020 to November 2021. The Canadian Revolver also provides for the issuance of letters of credit.

We had no borrowings or repayments under this revolver during the years ended December 31, 2020, 2019, and 2018.

Accounts Receivable Sales Facility

We have an accounts receivable sales facility with a group of third-party entities and financial institutions to sell eligible trade receivables on a revolving basis. In July 2020, we extended the maturity date of this facility to July 2021 and decreased the facility amount from \$1.3 billion to \$1.0 billion. Under this program, one of our marketing subsidiaries (Valero Marketing) sells eligible receivables, without recourse, to another of our subsidiaries (Valero Capital), whereupon the receivables are no longer owned by Valero Marketing. Valero Capital, in turn, sells an undivided percentage ownership interest in the eligible receivables, without recourse, to the third-party entities and financial institutions. To the extent that Valero Capital retains an ownership interest in the receivables it has purchased from Valero Marketing, such interest is included in our financial statements solely as a result of the consolidation of the financial statements of Valero Capital with those of Valero Energy Corporation; the receivables are not available to satisfy the claims of the creditors of Valero Marketing or Valero Energy Corporation.

As of December 31, 2020 and 2019, \$1.4 billion and \$2.2 billion, respectively, of our accounts receivable composed the designated pool of accounts receivable included in the program. All amounts outstanding under the accounts receivable sales facility are reflected as debt on our balance sheets and proceeds and repayments are reflected as cash flows from financing activities on the statements of cash flows.

During the year ended December 31, 2020, we sold \$300 million of eligible receivables under our accounts receivable sales facility and repaid \$400 million. During the year ended December 31, 2019, we sold \$900 million of eligible receivables under our accounts receivable sales facility and repaid \$900 million. The variable interest rate on the borrowings outstanding under this facility as of December 31, 2019 was 2.3866 percent. During the year ended December 31, 2018, we had no proceeds from or repayments under the accounts receivable sales facility.

VLP Revolver

As of December 31, 2018, VLP had a \$750 million senior unsecured revolving credit facility (the VLP Revolver) with a group of lenders that was scheduled to mature in November 2020. However, on January 10, 2019, in connection with the completion of the Merger Transaction as described in Note 3, the VLP Revolver was terminated.

During the year ended December 31, 2018, VLP repaid the outstanding balance of \$410 million on the VLP Revolver using proceeds from its public offering of \$500 million 4.5 percent Senior Notes as described in “*Public Debt*” below.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Summary of Credit Facilities

We had outstanding borrowings, letters of credit issued, and availability under our credit facilities as follows (amounts in millions and currency in U.S. dollars, except as noted):

	Facility Amount	Maturity Date	December 31, 2020		
			Outstanding Borrowings	Letters of Credit Issued (a)	Availability
Committed facilities:					
Valero Revolver	\$ 4,000	March 2024	\$ —	\$ 34	\$ 3,966
364-day Revolving Credit Facility	\$ 875	April 2021	\$ —	n/a	\$ 875
Canadian Revolver	C\$ 150	November 2021	C\$ —	C\$ 5	C\$ 145
Accounts receivable sales facility (b)	\$ 1,000	July 2021	\$ —	n/a	\$ 885
Letter of credit facility (c)	\$ 50	November 2021	n/a	\$ —	\$ 50
Committed facility of VIE (d):					
IEnova Revolver	\$ 660	February 2028	\$ 598	n/a	\$ 62
Uncommitted facilities:					
Letter of credit facilities	n/a	n/a	n/a	\$ 150	n/a

(a) Letters of credit issued as of December 31, 2020 expire at various times in 2021 through 2023.

(b) The available borrowing capacity was lower than the facility amount due to low product prices impacting the amount of eligible receivables.

(c) We extended the maturity date of the letter of credit facility from November 2020 to November 2021.

(d) Creditors of our VIE do not have recourse against us.

We are charged letter of credit issuance fees under our various uncommitted short-term bank credit facilities. These uncommitted credit facilities have no commitment fees or compensating balance requirements.

Public Debt

During the year ended December 31, 2020, the following activity occurred:

- In September 2020, we issued the following senior notes:
 - \$575 million of Floating Rate Senior Notes due September 15, 2023 (the Floating Rate Notes), which bear interest at a rate of three-month London Interbank Offered Rate (LIBOR) plus 1.150 percent per annum, subject to certain adjustments set forth in the terms of the Floating Rate Notes;
 - \$925 million of 1.200 percent Senior Notes due March 15, 2024;

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- \$400 million of 2.850 percent Senior Notes due April 15, 2025 that constitute an additional issuance of our 2.850 percent Senior Notes due April 15, 2025, of which \$650 million aggregate principal amount was issued in April 2020; and
- \$600 million of 2.150 percent Senior Notes due September 15, 2027.
- In April 2020, we issued \$850 million of 2.700 percent Senior Notes due April 15, 2023 and \$650 million of 2.850 percent Senior Notes due April 15, 2025.

Proceeds from the April and September 2020 debt issuances totaled \$4.020 billion before deducting the underwriting discount and other debt issuance costs.

During the year ended December 31, 2019, the following activity occurred:

- We issued \$1 billion of 4.00 percent Senior Notes due April 1, 2029. Proceeds from this debt issuance totaled \$992 million before deducting the underwriting discount and other debt issuance costs. The proceeds were used to redeem our 6.125 percent Senior Notes due February 1, 2020 for \$871 million, or 102.48 percent of stated value, which includes an early redemption fee of \$21 million that is reflected in “other income, net” in our statement of income for the year ended December 31, 2019.
- In connection with the completion of the Merger Transaction as described in Note 3, Valero Energy Corporation, the parent company, entered into a guarantee agreement to fully and unconditionally guarantee the prompt payment, when due, of the following debt issued by VLP, one of its wholly owned subsidiaries, that was outstanding upon completion of the Merger Transaction:
 - \$500 million of 4.375 percent Senior Notes due December 15, 2026; and
 - \$500 million of 4.5 percent Senior Notes due March 15, 2028.

Effective March 31, 2020, we early applied the U.S. SEC’s Final Rule Release No. 33-10762, *Financial Disclosures About Guarantors and Issuers of Guaranteed Securities and Affiliates Whose Securities Collateralize a Registrant’s Securities*. This rule allows us to cease providing the previously required condensed consolidating financial information in our periodic reports while the senior notes issued by VLP noted above are outstanding, as VLP’s reporting obligation was suspended on January 22, 2019 in connection with the completion of the Merger Transaction.

During the year ended December 31, 2018, the following activity occurred:

- We issued \$750 million of 4.35 percent Senior Notes due June 1, 2028. Proceeds from this debt issuance totaled \$749 million before deducting the underwriting discount and other debt issuance costs. The proceeds were used to redeem our 9.375 percent Senior Notes due March 15, 2019 for \$787 million, or 104.9 percent of stated value, which includes an early redemption fee of \$37 million that is reflected in “other income, net” in our statement of income for the year ended December 31, 2018.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- VLP issued \$500 million of 4.5 percent Senior Notes due March 15, 2028. Proceeds from this debt issuance totaled \$498 million before deducting the underwriting discount and other debt issuance costs. The proceeds were available only to the operations of VLP and were used to repay the outstanding balance of \$410 million on the VLP Revolver and \$85 million on its notes payable to us, which is eliminated in consolidation.

Other Debt

During the year ended December 31, 2018, we retired \$137 million of debt assumed in connection with the Peru Acquisition with available cash on hand.

Other Disclosures

“Interest and debt expense, net of capitalized interest” is comprised as follows (in millions):

	Year Ended December 31,		
	2020	2019	2018
Interest and debt expense	\$ 638	\$ 544	\$ 557
Less: Capitalized interest	75	90	87
Interest and debt expense, net of capitalized interest	<u>\$ 563</u>	<u>\$ 454</u>	<u>\$ 470</u>

Our credit facilities and other debt arrangements contain various customary restrictive covenants, including cross-default and cross-acceleration clauses.

Principal maturities for our debt obligations as of December 31, 2020 were as follows (in millions):

2021 (a)	\$ 603
2022	6
2023	1,445
2024	925
2025	1,650
Thereafter	8,474
Net unamortized debt issuance costs and other	(90)
Total debt	<u>\$ 13,013</u>

(a) As of December 31, 2020, our debt obligations due in 2021 include \$598 million associated with borrowings under the IEnova Revolver.

11. COMMITMENTS AND CONTINGENCIES**Purchase Obligations**

We have various purchase obligations under certain crude oil and other feedstock supply arrangements, industrial gas supply arrangements (such as hydrogen supply arrangements), natural gas supply arrangements, and various throughput, transportation and terminaling agreements. We enter into these contracts to ensure an adequate supply of feedstock and utilities and adequate storage capacity to operate

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

our refineries and ethanol plants. Substantially all of our purchase obligations are based on market prices or adjustments based on market indices. Certain of these purchase obligations include fixed or minimum volume requirements, while others are based on our usage requirements. None of these obligations is associated with suppliers' financing arrangements. These purchase obligations are not reflected as liabilities.

Self-Insurance

We are self-insured for certain medical and dental, workers' compensation, automobile liability, general liability, and property liability claims up to applicable retention limits. Liabilities are accrued for self-insured claims, or when estimated losses exceed coverage limits, and when sufficient information is available to reasonably estimate the amount of the loss. These liabilities are included in accrued expenses and other long-term liabilities.

12. EQUITY

Share Activity

Activity in the number of shares of common stock and treasury stock was as follows (in millions):

	Common Stock	Treasury Stock
Balance as of December 31, 2017	673	(240)
Open market stock purchases	—	(16)
Balance as of December 31, 2018	673	(256)
Transactions in connection with stock-based compensation plans	—	1
Open market stock purchases	—	(9)
Balance as of December 31, 2019	673	(264)
Transactions in connection with stock-based compensation plans	—	1
Open market stock purchases	—	(2)
Balance as of December 31, 2020	<u>673</u>	<u>(265)</u>

Preferred Stock

We have 20 million shares of preferred stock authorized with a par value of \$0.01 per share. No shares of preferred stock were outstanding as of December 31, 2020 or 2019.

Treasury Stock

We purchase shares of our outstanding common stock as authorized under our common stock purchase program (described below) and to meet our obligations under employee stock-based compensation plans.

On September 21, 2016, our board of directors authorized our purchase of up to \$2.5 billion of our outstanding common stock with no expiration date, and we completed that program during 2018. On January 23, 2018, our board of directors authorized our purchase of up to an additional \$2.5 billion of our outstanding common stock (the 2018 Program) with no expiration date. During the years ended December 31, 2020, 2019, and 2018, we purchased \$83 million, \$752 million, and \$1.5 billion,

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

respectively, of our common stock under our programs. As of December 31, 2020, we have approval under the 2018 Program to purchase approximately \$1.4 billion of our common stock.

Common Stock Dividends

On January 26, 2021, our board of directors declared a quarterly cash dividend of \$0.98 per common share payable on March 4, 2021 to holders of record at the close of business on February 11, 2021.

Income Tax Effects Related to Components of Other Comprehensive Income (Loss)

The tax effects allocated to each component of other comprehensive income (loss) were as follows (in millions):

	Before-Tax Amount	Tax Expense (Benefit)	Net Amount
Year ended December 31, 2020			
Foreign currency translation adjustment	\$ 161	\$ —	\$ 161
Pension and other postretirement benefits:			
Loss arising during the year related to:			
Net actuarial loss	(128)	(26)	(102)
Prior service cost	(5)	(1)	(4)
Amounts reclassified into income related to:			
Net actuarial loss	74	17	57
Prior service credit	(26)	(6)	(20)
Curtailement and settlement loss	5	1	4
Net loss on pension and other postretirement benefits	(80)	(15)	(65)
Derivative instruments designated and qualifying as cash flow hedges:			
Net gain arising during the year	36	3	33
Net gain reclassified into income	(34)	(4)	(30)
Net gain on cash flow hedges	2	(1)	3
Other comprehensive income	<u>\$ 83</u>	<u>\$ (16)</u>	<u>\$ 99</u>

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	<u>Before-Tax Amount</u>	<u>Tax Expense (Benefit)</u>	<u>Net Amount</u>
Year ended December 31, 2019			
Foreign currency translation adjustment	\$ 349	\$ —	\$ 349
Pension and other postretirement benefits:			
Loss arising during the year related to:			
Net actuarial loss	(245)	(54)	(191)
Prior service cost	(3)	(1)	(2)
Miscellaneous loss	—	4	(4)
Amounts reclassified into income related to:			
Net actuarial loss	38	9	29
Prior service credit	(28)	(6)	(22)
Curtailment and settlement loss	4	1	3
Net loss on pension and other postretirement benefits	(234)	(47)	(187)
Derivative instruments designated and qualifying as cash flow hedges:			
Net loss arising during the year	(6)	(1)	(5)
Net gain reclassified into income	(2)	—	(2)
Net loss on cash flow hedges	(8)	(1)	(7)
Other comprehensive income	<u>\$ 107</u>	<u>\$ (48)</u>	<u>\$ 155</u>
Year ended December 31, 2018			
Foreign currency translation adjustment	\$ (517)	\$ —	\$ (517)
Pension and other postretirement benefits:			
Gain arising during the year related to:			
Net actuarial gain	1	—	1
Prior service credit	7	1	6
Amounts reclassified into income related to:			
Net actuarial loss	63	14	49
Prior service credit	(29)	(7)	(22)
Curtailment and settlement loss	7	2	5
Net gain on pension and other postretirement benefits	49	10	39
Other comprehensive loss	<u>\$ (468)</u>	<u>\$ 10</u>	<u>\$ (478)</u>

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Accumulated Other Comprehensive Loss

Changes in accumulated other comprehensive loss by component, net of tax, were as follows (in millions):

	Foreign Currency Translation Adjustment	Defined Benefit Plans Items	Gains (Losses) on Cash Flow Hedges	Total
Balance as of December 31, 2017	\$ (507)	\$ (433)	\$ —	\$ (940)
Other comprehensive income (loss) before reclassifications	(515)	7	—	(508)
Amounts reclassified from accumulated other comprehensive loss	—	32	—	32
Other comprehensive income (loss)	(515)	39	—	(476)
Reclassification of stranded income tax effects	—	(91)	—	(91)
Balance as of December 31, 2018	(1,022)	(485)	—	(1,507)
Other comprehensive income (loss) before reclassifications	346	(197)	(2)	147
Amounts reclassified from accumulated other comprehensive loss	—	10	(1)	9
Other comprehensive income (loss)	346	(187)	(3)	156
Balance as of December 31, 2019	(676)	(672)	(3)	(1,351)
Other comprehensive income (loss) before reclassifications	161	(106)	14	69
Amounts reclassified from accumulated other comprehensive loss	—	41	(13)	28
Other comprehensive income (loss)	161	(65)	1	97
Balance as of December 31, 2020	<u>\$ (515)</u>	<u>\$ (737)</u>	<u>\$ (2)</u>	<u>\$ (1,254)</u>

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Gains (losses) reclassified out of accumulated other comprehensive loss and into net income (loss) were as follows (in millions):

Details about Accumulated Other Comprehensive Loss Components	Year Ended December 31,			Affected Line Item in the Statement of Income
	2020	2019	2018	
Amortization of items related to defined benefit pension plans:				
Net actuarial loss	\$ (74)	\$ (38)	\$ (63)	(a) Other income, net
Prior service credit	26	28	29	(a) Other income, net
Curtailment and settlement	(5)	(4)	(7)	(a) Other income, net
	(53)	(14)	(41)	Total before tax
	12	4	9	Tax benefit
	<u>\$ (41)</u>	<u>\$ (10)</u>	<u>\$ (32)</u>	Net of tax
Gains on cash flow hedges:				
Commodity contracts	\$ 34	\$ 2	\$ —	Revenues
	34	2	—	Total before tax
	(4)	—	—	Tax expense
	<u>\$ 30</u>	<u>\$ 2</u>	<u>\$ —</u>	Net of tax
Total reclassifications for the year	<u>\$ (11)</u>	<u>\$ (8)</u>	<u>\$ (32)</u>	Net of tax

(a) These accumulated other comprehensive loss components are included in the computation of net periodic benefit cost, as discussed in Note 14.

13. VARIABLE INTEREST ENTITIES

Consolidated VIEs

In the normal course of business, we have financial interests in certain entities that have been determined to be VIEs. We consolidate a VIE when we have a variable interest in an entity for which we are the primary beneficiary such that we have (i) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and (ii) the obligation to absorb losses of or the right to receive benefits from the VIE that could potentially be significant to the VIE. In order to make this determination, we evaluated our contractual arrangements with the VIE, including arrangements for the use of assets, purchases of products and services, debt, equity, or management of operating activities.

The following discussion summarizes our involvement with our consolidated VIEs:

- DGD is a joint venture with a subsidiary of Darling Ingredients Inc. that owns and operates a plant that processes rendered and recycled materials, including animal fats, used cooking oils, and other vegetable oils, into renewable diesel. The plant is located in Norco, Louisiana next to our

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

St. Charles Refinery. Our significant agreements with DGD include an operations agreement that outlines our responsibilities as operator of the plant.

As operator, we operate the plant and perform certain day-to-day operating and management functions for DGD as an independent contractor. The operations agreement provides us (as operator) with certain power to direct the activities that most significantly impact DGD's economic performance. Because this agreement conveys such power to us and is separate from our ownership rights, we determined that DGD was a VIE. For this reason and because we hold a 50 percent ownership interest that provides us with significant economic rights and obligations, we determined that we are the primary beneficiary of DGD. DGD has risk associated with its operations because it generates revenues from third-party customers.

- Central Mexico Terminals is a collective group of three subsidiaries of Infraestructura Energetica Nova, S.A.B. de C.V. (IEnova), a Mexican company and subsidiary of Semptra Energy, a U.S. public company. We have terminaling agreements with Central Mexico Terminals that represent variable interests because we have determined them to be finance leases due to our exclusive use of the terminals. Although we do not have an ownership interest in the entities that own each of the three terminals, the finance leases convey to us (i) the power to direct the activities that most significantly impact the economic performance of all three terminals and (ii) the ability to influence the benefits received or the losses incurred by the terminals because of our use of the terminals. As a result, we determined each of the entities was a VIE and that we are the primary beneficiary of each. Substantially all of Central Mexico Terminals' revenues will be derived from us; therefore, we believe there is limited risk to us associated with Central Mexico Terminals' operations.
- We also have financial interests in other entities that have been determined to be VIEs because the entities' contractual arrangements transfer the power to us to direct the activities that most significantly impact their economic performance or reduce the exposure to operational variability and risk of loss created by the entity that otherwise would be held exclusively by the equity owners. Furthermore, we determined that we are the primary beneficiary of these VIEs because (i) certain contractual arrangements (exclusive of our ownership rights) provide us with the power to direct the activities that most significantly impact the economic performance of these entities and/or (ii) our 50 percent ownership interests provide us with significant economic rights and obligations.

The assets of our VIEs can only be used to settle their own obligations and the creditors of our VIEs have no recourse to our assets. We do not provide financial guarantees to our VIEs. Although we have provided credit facilities to some of our VIEs in support of their construction or acquisition activities, these transactions are eliminated in consolidation. Our financial position, results of operations, and cash flows are impacted by the performance of our consolidated VIEs, net of intercompany eliminations, to the extent of our ownership interest in each VIE.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following tables present summarized balance sheet information for the significant assets and liabilities of our VIEs, which are included in our balance sheets (in millions).

	December 31, 2020			
	DGD	Central Mexico Terminals	Other	Total
Assets				
Cash and cash equivalents	\$ 144	\$ 1	\$ 16	\$ 161
Other current assets	219	24	8	251
Property, plant, and equipment, net	1,232	590	96	1,918
Liabilities				
Current liabilities, including current portion of debt and finance lease obligations	\$ 90	\$ 620	\$ 8	\$ 718
Debt and finance lease obligations, less current portion	1	—	25	26
December 31, 2019				
	DGD	Central Mexico Terminals	Other	Total
Assets				
Cash and cash equivalents	\$ 85	\$ —	\$ 25	\$ 110
Other current assets	567	33	89	689
Property, plant, and equipment, net	706	381	105	1,192
Liabilities				
Current liabilities, including current portion of debt and finance lease obligations	\$ 66	\$ 409	\$ 8	\$ 483
Debt and finance lease obligations, less current portion	—	—	31	31

Non-Consolidated VIEs

We hold variable interests in VIEs that have not been consolidated because we are not considered the primary beneficiary. These non-consolidated VIEs are not material to our financial position or results of operations and are accounted for as equity investments.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. EMPLOYEE BENEFIT PLANS

Defined Benefit Plans

We have defined benefit pension plans, some of which are subject to collective bargaining agreements, that cover most of our employees. These plans provide eligible employees with retirement income based primarily on years of service and compensation during specific periods under final average pay and cash balance formulas. We fund all of our pension plans as required by local regulations. In the U.S., all qualified pension plans are subject to the Employee Retirement Income Security Act's minimum funding standard. We typically do not fund or fully fund U.S. nonqualified and certain international pension plans that are not subject to funding requirements because contributions to these pension plans may be less economic and investment returns may be less attractive than our other investment alternatives.

We also provide health care and life insurance benefits for certain retired employees through our postretirement benefit plans. Most of our employees become eligible for these benefits if, while still working for us, they reach normal retirement age or take early retirement. These plans are unfunded, and retired employees share the cost with us. Individuals who became our employees as a result of an acquisition became eligible for postretirement benefits under our plans as determined by the terms of the relevant acquisition agreement.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The changes in benefit obligation related to all of our defined benefit plans, the changes in fair value of plan assets^(a), and the funded status of our defined benefit plans as of and for the years ended below were as follows (in millions):

	Pension Plans		Other Postretirement Benefit Plans	
	December 31,		December 31,	
	2020	2019	2020	2019
Changes in benefit obligation				
Benefit obligation as of beginning of year	\$ 3,239	\$ 2,639	\$ 336	\$ 292
Service cost	140	119	6	5
Interest cost	85	98	9	11
Participant contributions	—	—	12	11
Benefits paid	(195)	(154)	(28)	(29)
Actuarial loss	339	528	23	41
Other	17	9	—	5
Benefit obligation as of end of year	<u>\$ 3,625</u>	<u>\$ 3,239</u>	<u>\$ 358</u>	<u>\$ 336</u>
Changes in plan assets (a)				
Fair value of plan assets as of beginning of year	\$ 2,709	\$ 2,236	\$ —	\$ —
Actual return on plan assets	413	490	—	—
Valero contributions	129	128	16	18
Participant contributions	—	—	12	11
Benefits paid	(195)	(154)	(28)	(29)
Other	11	9	—	—
Fair value of plan assets as of end of year	<u>\$ 3,067</u>	<u>\$ 2,709</u>	<u>\$ —</u>	<u>\$ —</u>
Reconciliation of funded status (a)				
Fair value of plan assets as of end of year	\$ 3,067	\$ 2,709	\$ —	\$ —
Less: Benefit obligation as of end of year	3,625	3,239	358	336
Funded status as of end of year	<u>\$ (558)</u>	<u>\$ (530)</u>	<u>\$ (358)</u>	<u>\$ (336)</u>
Accumulated benefit obligation	\$ 3,398	\$ 3,039	n/a	n/a

(a) Plan assets include only the assets associated with pension plans subject to legal minimum funding standards. Plan assets associated with U.S. nonqualified pension plans are not included here because they are not protected from our creditors and therefore cannot be reflected as a reduction from our obligations under the pension plans. As a result, the reconciliation of funded status does not reflect the effect of plan assets that exist for all of our defined benefit plans. See Note 20 for the assets associated with certain U.S. nonqualified pension plans.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The actuarial loss for the year ended December 31, 2020 primarily resulted from a decrease in the discount rates used to determine our benefit obligations for our pension plans from 3.14 percent in 2019 to 2.62 percent in 2020. The actuarial loss for the year ended December 31, 2019 primarily resulted from a decrease in the discount rates used to determine our benefit obligations for our pension plans from 4.25 percent in 2018 to 3.14 percent in 2019.

The fair value of our plan assets as of December 31, 2020 and 2019 were favorably impacted by the return on plan assets resulting primarily from an improvement in equity market prices for each year.

Amounts recognized in our balance sheet for our pension and other postretirement benefits plans include (in millions):

	Pension Plans		Other Postretirement Benefit Plans	
	December 31,		December 31,	
	2020	2019	2020	2019
Deferred charges and other assets, net	\$ 7	\$ 5	\$ —	\$ —
Accrued expenses	(24)	(17)	(21)	(20)
Other long-term liabilities	(541)	(518)	(337)	(316)
	<u>\$ (558)</u>	<u>\$ (530)</u>	<u>\$ (358)</u>	<u>\$ (336)</u>

The following table presents information for our pension plans with projected benefit obligations in excess of plan assets (in millions):

	December 31,	
	2020	2019
Projected benefit obligation	\$ 3,561	\$ 3,182
Fair value of plan assets	2,997	2,647

The following table presents information for our pension plans with accumulated benefit obligations in excess of plan assets (in millions):

	December 31,	
	2020	2019
Accumulated benefit obligation	\$ 3,336	\$ 2,760
Fair value of plan assets	2,997	2,402

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Benefit payments that we expect to pay, including amounts related to expected future services that we expect to receive, are as follows for the years ending December 31 (in millions):

	Pension Benefits	Other Postretirement Benefits
2021	\$ 195	\$ 21
2022	227	21
2023	199	21
2024	202	20
2025	215	20
2026-2030	1,107	90

We plan to contribute \$128 million to our pension plans and \$22 million to our other postretirement benefit plans during 2021.

The components of net periodic benefit cost related to our defined benefit plans were as follows (in millions):

	Pension Plans			Other Postretirement Benefit Plans		
	Year Ended December 31,			Year Ended December 31,		
	2020	2019	2018	2020	2019	2018
Service cost	\$ 140	\$ 119	\$ 133	\$ 6	\$ 5	\$ 6
Interest cost	85	98	91	9	11	10
Expected return on plan assets	(179)	(166)	(163)	—	—	—
Amortization of:						
Net actuarial (gain) loss	74	41	65	—	(3)	(2)
Prior service credit	(19)	(19)	(18)	(7)	(9)	(11)
Special charges	5	4	7	—	1	—
Net periodic benefit cost	<u>\$ 106</u>	<u>\$ 77</u>	<u>\$ 115</u>	<u>\$ 8</u>	<u>\$ 5</u>	<u>\$ 3</u>

The components of net periodic benefit cost other than the service cost component (i.e., the non-service cost components) are included in “other income, net” in the statements of income.

Amortization of prior service credit shown in the preceding table was based on a straight-line amortization of the cost over the average remaining service period of employees expected to receive benefits under each respective plan. Amortization of the net actuarial (gain) loss shown in the preceding table was based on the straight-line amortization of the excess of the unrecognized (gain) loss over 10 percent of the greater of the projected benefit obligation or market-related value of plan assets (smoothed asset value) over the average remaining service period of active employees expected to receive benefits under each respective plan.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Pre-tax amounts recognized in other comprehensive income (loss) were as follows (in millions):

	Pension Plans			Other Postretirement Benefit Plans		
	Year Ended December 31,			Year Ended December 31,		
	2020	2019	2018	2020	2019	2018
Net gain (loss) arising during the year:						
Net actuarial gain (loss)	\$ (105)	\$ (204)	\$ (8)	\$ (23)	\$ (41)	\$ 9
Prior service (cost) credit	(5)	—	7	—	(3)	—
Net (gain) loss reclassified into income:						
Net actuarial (gain) loss	74	41	65	—	(3)	(2)
Prior service credit	(19)	(19)	(18)	(7)	(9)	(11)
Curtailment and settlement loss	5	4	7	—	—	—
Total changes in other comprehensive income (loss)	\$ (50)	\$ (178)	\$ 53	\$ (30)	\$ (56)	\$ (4)

The pre-tax amounts in accumulated other comprehensive loss that have not yet been recognized as components of net periodic benefit cost were as follows (in millions):

	Pension Plans		Other Postretirement Benefit Plans	
	December 31,		December 31,	
	2020	2019	2020	2019
Net actuarial (gain) loss	\$ 1,014	\$ 988	\$ 4	\$ (20)
Prior service credit	(66)	(90)	(13)	(19)
Total	\$ 948	\$ 898	\$ (9)	\$ (39)

The weighted-average assumptions used to determine the benefit obligations were as follows:

	Pension Plans		Other Postretirement Benefit Plans	
	December 31,		December 31,	
	2020	2019	2020	2019
Discount rate	2.62 %	3.14 %	2.64 %	3.32 %
Rate of compensation increase	3.66 %	3.75 %	n/a	n/a
Interest crediting rate for cash balance plans	3.03 %	3.03 %	n/a	n/a

The discount rate assumption used to determine the benefit obligations as of December 31, 2020 and 2019 for the majority of our pension plans and other postretirement benefit plans was based on the Aon AA Only Above Median yield curve and considered the timing of the projected cash outflows under our

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

plans. This curve was designed by Aon, our actuarial consultant, to provide a means for plan sponsors to value the liabilities of their pension plans or postretirement benefit plans. To develop this curve, a hypothetical double-A yield curve represented by a series of annualized individual discount rates with maturities from one-half year to 99 years is constructed. Each bond issue underlying the double-A yield curve is required to have an average rating of double-A when averaging all available ratings by Moody's Investors Service, Standard & Poor's Ratings Services, and Fitch Ratings. Only the bonds representing the 50 percent highest yielding issuances of this double-A yield curve are then included in the Aon AA Only Above Median yield curve.

We based our discount rate assumption on the Aon AA Only Above Median yield curve because we believe it is representative of the types of bonds we would use to settle our pension and other postretirement benefit plan liabilities as of those dates. We believe that the yields associated with the bonds used to develop this yield curve reflect the current level of interest rates.

The weighted-average assumptions used to determine the net periodic benefit cost were as follows:

	Pension Plans			Other Postretirement Benefit Plans		
	Year Ended December 31,			Year Ended December 31,		
	2020	2019	2018	2020	2019	2018
Discount rate	3.14 %	4.24 %	3.59 %	3.32 %	4.40 %	3.72 %
Expected long-term rate of return on plan assets	7.20 %	7.22 %	7.24 %	n/a	n/a	n/a
Rate of compensation increase	3.75 %	3.78 %	3.86 %	n/a	n/a	n/a
Interest crediting rate for cash balance plans	3.03 %	3.04 %	3.04 %	n/a	n/a	n/a

The assumed health care cost trend rates were as follows:

	December 31,	
	2020	2019
Health care cost trend rate assumed for the next year	6.83 %	7.32 %
Rate to which the cost trend rate was assumed to decline (the ultimate trend rate)	5.00 %	5.00 %
Year that the rate reaches the ultimate trend rate	2026	2026

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following tables present the fair values of the assets of our pension plans (in millions) as of December 31, 2020 and 2019 by level of the fair value hierarchy. Assets categorized in Level 1 of the hierarchy are measured at fair value using a market approach based on unadjusted quoted prices from national securities exchanges. Assets categorized in Level 2 of the hierarchy are measured at net asset value in a market that is not active or inputs other than quoted prices that are observable. As previously noted, we do not fund or fully fund U.S. nonqualified and certain international pension plans that are not subject to funding requirements, and we do not fund our other postretirement benefit plans.

	Fair Value Hierarchy			Total as of December 31, 2020
	Level 1	Level 2	Level 3	
Equity securities (a)	\$ 682	\$ —	\$ —	\$ 682
Mutual funds	244	—	—	244
Corporate debt instruments (a)	—	297	—	297
Government securities	85	142	—	227
Common collective trusts (b)	—	1,066	—	1,066
Pooled separate accounts (c)	—	316	—	316
Private funds	—	128	—	128
Insurance contract	—	15	—	15
Interest and dividends receivable	5	—	—	5
Cash and cash equivalents	98	—	—	98
Securities transactions payable, net	(11)	—	—	(11)
Total pension plan assets	<u>\$ 1,103</u>	<u>\$ 1,964</u>	<u>\$ —</u>	<u>\$ 3,067</u>

See notes on page 110.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	Fair Value Hierarchy			Total as of December 31, 2019
	Level 1	Level 2	Level 3	
Equity securities (a)	\$ 831	\$ 1	\$ —	\$ 832
Mutual funds	213	—	—	213
Corporate debt instruments (a)	—	293	—	293
Government securities	53	148	—	201
Common collective trusts (b)	—	751	—	751
Pooled separate accounts (c)	—	250	—	250
Private funds	—	104	—	104
Insurance contract	—	17	—	17
Interest and dividends receivable	5	—	—	5
Cash and cash equivalents	59	—	—	59
Securities transactions payable, net	(16)	—	—	(16)
Total pension plan assets	<u>\$ 1,145</u>	<u>\$ 1,564</u>	<u>\$ —</u>	<u>\$ 2,709</u>

(a) This class of securities includes domestic and international stocks, which are held in a wide range of industry sectors.

(b) This class primarily includes investments in approximately 80 percent equities and 20 percent bonds as of December 31, 2020. As of December 31, 2019, this class included primarily investments in approximately 75 percent equities and 25 percent bonds.

(c) This class primarily includes investments in approximately 60 percent equities and 40 percent bonds as of December 31, 2020 and 2019. These pension assets are held by our international pension plans.

The investment policies and strategies for the assets of our pension plans incorporate a well-diversified approach that is expected to earn long-term returns from capital appreciation and a growing stream of current income. This approach recognizes that assets are exposed to risk and the market value of the pension plans' assets may fluctuate from year to year. Risk tolerance is determined based on our financial ability to withstand risk within the investment program and the willingness to accept return volatility. In line with the investment return objective and risk parameters, the pension plans' mix of assets includes a diversified portfolio of equity and fixed-income investments. 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. As of December 31, 2020, the target allocations for plan assets under our primary pension plan are 70 percent equity securities and 30 percent fixed income investments.

The expected long-term rate of return on plan assets is based on a forward-looking expected asset return model. This model derives an expected rate of return based on the target asset allocation of a plan's assets. The underlying assumptions regarding expected rates of return for each asset class reflect Aon's best expectations for these asset classes. The model reflects the positive effect of periodic rebalancing among diversified asset classes. We select an expected asset return that is supported by this model.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Defined Contribution Plans

We have defined contribution plans that cover most of our employees. Our contributions to these plans are based on employees' compensation and/or a partial match of employee contributions to the plans. Our contributions to these defined contribution plans were \$80 million, \$77 million, and \$74 million for the years ended December 31, 2020, 2019, and 2018, respectively.

15. STOCK-BASED COMPENSATION**Overview**

Under our 2020 Omnibus Stock Incentive Plan (the 2020 OSIP), various stock and stock-based awards may be granted to employees, non-employee directors, and third-party service providers. The 2020 OSIP permits grants of (i) restricted stock and restricted stock units; (ii) stock options (including incentive and non-qualified stock options); (iii) stock appreciation rights; (iv) performance awards of cash, stock, or other securities; and (v) other stock-based awards (e.g., stock unit awards). Awards under the 2020 OSIP are granted at the discretion of our compensation committee and may be subject to vesting or performance periods, performance goals, or other restrictions. The 2020 OSIP was approved by our stockholders on April 30, 2020, and as of such date, any shares of common stock that were available to be awarded under the 2011 Omnibus Stock Incentive Plan (the 2011 OSIP) became available for issuance under the 2020 OSIP and any shares of common stock subject to awards under the 2011 OSIP outstanding as of April 30, 2020, that are subsequently forfeited, terminated, canceled or rescinded, settled in cash in lieu of common stock, exchanged for awards not involving common stock, or expire unexercised also become available for issuance under the 2020 OSIP. No future awards will be made under the 2011 OSIP. As of December 31, 2020, 14,787,213 shares of our common stock remained available to be awarded under the 2020 OSIP.

The following table reflects activity related to our stock-based compensation arrangements (in millions):

	Year Ended December 31,		
	2020	2019	2018
Stock-based compensation expense:			
Restricted stock	\$ 63	\$ 64	\$ 63
Performance awards	15	23	22
Stock options and other awards	2	2	1
Total stock-based compensation expense	\$ 80	\$ 89	\$ 86
Tax benefit recognized on stock-based compensation expense	\$ 13	\$ 19	\$ 18
Tax benefit realized for tax deductions resulting from exercises and vestings	1	17	32

The following is a discussion of our significant stock-based compensation arrangement.

Restricted Stock

Employees, non-employee directors, and third-party service providers are eligible to receive restricted stock, which vests in accordance with individual written agreements between the participants and us, usually in equal annual installments over a period of three years beginning one year after the date of

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

grant. The fair value of each share of restricted stock is equal to the market price of our common stock. A summary of the status of our restricted stock awards is presented in the following table:

	Number of Shares	Weighted- Average Grant-Date Fair Value Per Share
Nonvested shares as of January 1, 2020	1,091,854	\$ 93.38
Granted	1,126,483	55.62
Vested	(770,727)	82.80
Forfeited	(9,698)	93.73
Nonvested shares as of December 31, 2020	<u>1,437,912</u>	<u>69.47</u>

As of December 31, 2020, there was \$57 million of unrecognized compensation cost related to outstanding unvested restricted stock awards, which is expected to be recognized over a weighted-average period of approximately two years.

The following table reflects activity related to our restricted stock:

	Year Ended December 31,		
	2020	2019	2018
Weighted-average grant-date fair value per share of restricted stock granted	\$ 55.62	\$ 98.75	\$ 92.12
Fair value of restricted stock vested (in millions)	35	74	80

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

16. INCOME TAXES
Income Statement Components

Income (loss) before income tax expense (benefit) was as follows (in millions):

	Year Ended December 31,		
	2020	2019	2018
U.S. operations	\$ (2,072)	\$ 2,496	\$ 3,168
International operations	62	990	1,064
Income (loss) before income tax expense (benefit)	<u>\$ (2,010)</u>	<u>\$ 3,486</u>	<u>\$ 4,232</u>

Statutory income tax rates applicable to the countries in which we operate during each of the years ended December 31, 2020, 2019, and 2018 were as follows:

U.S.	21 %
Canada	15 %
U.K.	19 %
Ireland	13 %
Peru	30 %
Mexico	30 %

The following is a reconciliation of income tax expense (benefit) computed by applying statutory income tax rates to actual income tax expense (benefit) (in millions):

	U.S.		International		Total	
	Amount	Percent	Amount	Percent	Amount	Percent
Year ended December 31, 2020						
Income tax benefit at statutory rates	\$ (435)	21.0 %	\$ (10)	(16.1)%	\$ (445)	22.1 %
U.S. state and Canadian provincial tax expense (benefit), net of federal income tax effect	(33)	1.6 %	27	43.5 %	(6)	0.3 %
Permanent differences	(23)	1.1 %	15	24.2 %	(8)	0.4 %
CARES Act (a)	(360)	17.4 %	—	—	(360)	17.9 %
Lapse of federal statute of limitations	(39)	1.8 %	—	—	(39)	1.9 %
Change in tax law	—	—	21	33.9 %	21	(1.0) %
Tax effects of income associated with noncontrolling interests	(66)	3.2 %	(8)	(12.9)%	(74)	3.7 %
Other, net	7	(0.3) %	1	1.6 %	8	(0.4) %
Income tax expense (benefit)	<u>\$ (949)</u>	<u>45.8 %</u>	<u>\$ 46</u>	<u>74.2 %</u>	<u>\$ (903)</u>	<u>44.9 %</u>

See notes on page 114.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	U.S.		International		Total	
	Amount	Percent	Amount	Percent	Amount	Percent
Year ended December 31, 2019						
Income tax expense at statutory rates	\$ 524	21.0 %	\$ 147	14.8 %	\$ 671	19.2 %
U.S. state and Canadian provincial tax expense, net of federal income tax effect	16	0.7 %	88	8.9 %	104	3.0 %
Permanent differences	(36)	(1.5) %	10	1.0 %	(26)	(0.7) %
GILTI tax (b)	115	4.6 %	—	—	115	3.3 %
Foreign tax credits	(95)	(3.8) %	—	—	(95)	(2.7) %
Repatriation withholding tax	45	1.8 %	—	—	45	1.3 %
Tax effects of income associated with noncontrolling interests	(77)	(3.1) %	2	0.2 %	(75)	(2.2) %
Other, net	(36)	(1.4) %	(1)	(0.1) %	(37)	(1.1) %
Income tax expense	<u>\$ 456</u>	<u>18.3 %</u>	<u>\$ 246</u>	<u>24.8 %</u>	<u>\$ 702</u>	<u>20.1 %</u>
Year ended December 31, 2018						
Income tax expense at statutory rates	\$ 665	21.0 %	\$ 163	15.3 %	\$ 828	19.6 %
U.S. state and Canadian provincial tax expense, net of federal income tax effect	44	1.4 %	80	7.5 %	124	2.9 %
Permanent differences	(9)	(0.3) %	—	—	(9)	(0.2) %
GILTI tax (b)	67	2.1 %	—	—	67	1.6 %
Foreign tax credits	(50)	(1.6) %	—	—	(50)	(1.2) %
Effects of Tax Reform (b)	(12)	(0.4) %	—	—	(12)	(0.3) %
Tax effects of income associated with noncontrolling interests	(49)	(1.5) %	—	—	(49)	(1.2) %
Other, net	(23)	(0.7) %	3	0.3 %	(20)	(0.5) %
Income tax expense	<u>\$ 633</u>	<u>20.0 %</u>	<u>\$ 246</u>	<u>23.1 %</u>	<u>\$ 879</u>	<u>20.7 %</u>

(a) See “*CARES Act*” on page 119 for a discussion of significant changes in tax law in the U.S that were enacted in 2020.

(b) Relates to the Tax Cuts and Jobs Act of 2017 (Tax Reform), which, among other provisions, resulted in a minimum tax on the income of international subsidiaries (the GILTI tax).

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Components of income tax expense (benefit) were as follows (in millions):

	U.S.	International	Total
Year ended December 31, 2020			
Current:			
Country	\$ (1,033)	\$ (34)	\$ (1,067)
U.S. state / Canadian provincial	9	(3)	6
Total current	<u>(1,024)</u>	<u>(37)</u>	<u>(1,061)</u>
Deferred:			
Country	126	53	179
U.S. state / Canadian provincial	(51)	30	(21)
Total deferred	<u>75</u>	<u>83</u>	<u>158</u>
Income tax expense (benefit)	<u>\$ (949)</u>	<u>\$ 46</u>	<u>\$ (903)</u>
Year ended December 31, 2019			
Current:			
Country	\$ 145	\$ 186	\$ 331
U.S. state / Canadian provincial	37	100	137
Total current	<u>182</u>	<u>286</u>	<u>468</u>
Deferred:			
Country	290	(28)	262
U.S. state / Canadian provincial	(16)	(12)	(28)
Total deferred	<u>274</u>	<u>(40)</u>	<u>234</u>
Income tax expense	<u>\$ 456</u>	<u>\$ 246</u>	<u>\$ 702</u>
Year ended December 31, 2018			
Current:			
Country	\$ 432	\$ 141	\$ 573
U.S. state / Canadian provincial	37	66	103
Total current	<u>469</u>	<u>207</u>	<u>676</u>
Deferred:			
Country	145	25	170
U.S. state / Canadian provincial	19	14	33
Total deferred	<u>164</u>	<u>39</u>	<u>203</u>
Income tax expense	<u>\$ 633</u>	<u>\$ 246</u>	<u>\$ 879</u>

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Income Taxes Paid (Refunded)

Income taxes paid to (received from) U.S. and international taxing authorities were as follows (in millions):

	Year Ended December 31,		
	2020	2019	2018
U.S.	\$ 130	\$ (298) (a)	\$ 1,016
International	73	182	345
Income taxes paid (refunded), net	<u>\$ 203</u>	<u>\$ (116)</u>	<u>\$ 1,361</u>

(a) This amount includes a refund of \$348 million, including interest, that we received related to the settlement of the combined audit of our U.S. federal income tax returns for 2010 and 2011. See “*Tax Returns Under Audit – U.S. Federal*” on page 119.

Deferred Income Tax Assets and Liabilities

The tax effects of significant temporary differences representing deferred income tax assets and liabilities were as follows (in millions):

	December 31,	
	2020	2019
Deferred income tax assets:		
Tax credit carryforwards	\$ 681	\$ 683
Net operating losses (NOLs)	678	582
Inventories	70	141
Compensation and employee benefit liabilities	199	213
Environmental liabilities	64	69
Other	128	156
Total deferred income tax assets	<u>1,820</u>	<u>1,844</u>
Valuation allowance	<u>(1,223)</u>	<u>(1,200)</u>
Net deferred income tax assets	<u>597</u>	<u>644</u>
Deferred income tax liabilities:		
Property, plant, and equipment	4,895	4,924
Deferred turnaround costs	302	331
Inventories	269	217
Investments	171	122
Other	235	153
Total deferred income tax liabilities	<u>5,872</u>	<u>5,747</u>
Net deferred income tax liabilities	<u>\$ 5,275</u>	<u>\$ 5,103</u>

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

We had the following income tax credit and loss carryforwards as of December 31, 2020 (in millions):

	Amount	Expiration
U.S. state income tax credits (gross amount)	\$ 86	2021 through 2033
U.S. state income tax credits (gross amount)	17	Unlimited
U.S. foreign tax credits	598	2027
U.S. state income tax NOLs (gross amount)	12,333	2021 through 2040
U.S. state income tax NOLs (gross amount)	34	Unlimited
International NOLs (gross amount)	20	2021 through 2030
International NOLs (gross amount)	120	Unlimited

We have recorded a valuation allowance as of December 31, 2020 and 2019 due to uncertainties related to our ability to utilize some of our deferred income tax assets associated with our U.S. foreign tax credits, certain U.S. state income tax credits, and certain NOLs before they expire. The valuation allowance is based on our estimates of future taxable income in the various jurisdictions in which we operate and the period over which deferred income tax assets will be recoverable. The valuation allowance increased by \$23 million in 2020 primarily due to an increase in U.S. state income tax NOLs.

As of December 31, 2020, the cumulative undistributed earnings of our international subsidiaries that is considered permanently reinvested in those countries were approximately \$3.2 billion. We are able to distribute cash via a dividend from our international subsidiaries with a full dividend received deduction in the U.S. However, there may be a cost to repatriate the undistributed earnings of certain of our international subsidiaries to us, including, but not limited to, withholding taxes imposed by certain international jurisdictions and U.S. state income taxes. It is not practicable to estimate the amount of additional tax that would be payable on those earnings, if distributed.

Unrecognized Tax Benefits

Change in Unrecognized Tax Benefits

The following is a reconciliation of the change in unrecognized tax benefits, excluding related interest and penalties, (in millions):

	Year Ended December 31,		
	2020	2019	2018
Balance as of beginning of year	\$ 897	\$ 970	\$ 941
Additions for tax positions related to the current year	5	19	23
Additions for tax positions related to prior years	9	30	28
Reductions for tax positions related to prior years	(20)	(101)	(19)
Reductions for tax positions related to the lapse of applicable statute of limitations	(44)	(14)	(1)
Settlements	—	(7)	(2)
Balance as of end of year	<u>\$ 847</u>	<u>\$ 897</u>	<u>\$ 970</u>

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Liability for Unrecognized Tax Benefits

The following is a reconciliation of unrecognized tax benefits to our liability for unrecognized tax benefits presented in our balance sheets (in millions).

	December 31,	
	2020	2019
Unrecognized tax benefits	\$ 847	\$ 897
Tax refund claims not yet filed but that we intend to file	(26)	(29)
Interest and penalties	110	100
Liability for unrecognized tax benefits presented in our balance sheets	<u>\$ 931</u>	<u>\$ 968</u>

Our liability for unrecognized tax benefits is reflected in the following balance sheet line items (in millions):

	December 31,	
	2020	2019
Income taxes payable	\$ 59	\$ —
Other long-term liabilities	859	954
Deferred tax liabilities	13	14
Liability for unrecognized tax benefits presented in our balance sheets	<u>\$ 931</u>	<u>\$ 968</u>

As of December 31, 2020, our liability for unrecognized tax benefits included \$525 million of refund claims associated with taxes paid on incentive payments received from the U.S. federal government for blending biofuels into refined petroleum products. We recorded a tax refund receivable of \$525 million in connection with our refund claims, but we also recorded a liability for unrecognized tax benefits of \$525 million due to the complexity of this matter and uncertainties with respect to sustaining these refund claims. Therefore, our financial position, results of operations, and liquidity will not be negatively impacted if we are unsuccessful in sustaining these refund claims.

Other Disclosures

As of December 31, 2020 and 2019, there was \$729 million and \$762 million, respectively, of unrecognized tax benefits that if recognized would reduce our annual effective tax rate.

Interest and penalties incurred during the years ended December 31, 2020, 2019, and 2018 were immaterial.

During the next 12 months, it is reasonably possible that our tax audit resolutions could reduce our liability for unrecognized tax benefits either because our tax positions are sustained upon audit or because we agree to their disallowance. We do not expect these reductions to have a material impact on our financial statements because such reductions would not materially affect our annual effective tax rate.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tax Returns Under Audit

U.S. Federal

In 2019, we settled the combined audit related to our U.S. federal income tax returns for 2010 and 2011 and received a refund of \$348 million, including interest. We did not have a significant change to our liability for unrecognized tax benefits upon settlement of the audit. As of December 31, 2020, our U.S. federal income tax returns for 2012 through 2015, 2017, and 2018 were under audit by the Internal Revenue Service (IRS). The IRS has proposed adjustments for certain open years and we are currently contesting the proposed adjustments with the Office of Appeals of the IRS. We are continuing to work with the IRS to resolve these matters and we believe that they will be resolved for amounts consistent with our recorded amounts of unrecognized tax benefits associated with these matters.

We have amended our U.S. federal income tax returns for 2005 through 2011 to exclude from taxable income incentive payments received from the U.S. federal government for blending biofuels into refined petroleum products, and we have claimed \$525 million in refunds. The 2005 through 2009 amended return refund claims have been disallowed by the IRS and we are currently evaluating our options to contest the disallowance of these adjustments. As noted above in the discussion of our liability for unrecognized tax benefits, an ultimate disallowance of these refund claims would not negatively impact our financial position, results of operations, and liquidity.

U.S. State

As of December 31, 2020, our California tax returns for 2004 through 2007 and 2011 through 2016 were under audit by the state of California. We do not expect the ultimate disposition of these audits will result in a material change to our financial position, results of operations, or liquidity. We believe these audits will be resolved for amounts consistent with our recorded amounts for unrecognized tax benefits associated with these audits.

International

As of December 31, 2020, our Canadian subsidiary's federal tax returns for 2013 through 2016 were under audit by the Canada Revenue Agency and our Quebec provincial tax returns for 2013 through 2016 were under audit by Revenue Quebec. We are also protesting proposed adjustments related to our Peruvian subsidiary's federal tax returns for 2016 and 2018, which were under audit by La Superintendencia Nacional de Aduanas y de Administración Tributaria. Additionally, our U.K. subsidiary's tax returns for 2017 and 2018 were opened for inquiry by Her Majesty's Revenue and Customs. We do not expect the ultimate disposition of these audits or inquiries will result in a material change to our financial position, results of operations, or liquidity.

CARES Act

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security (CARES) Act was enacted, which resulted in significant changes to the U.S. Internal Revenue Code of 1986, as amended. The most significant changes affecting us were as follows:

- Modification of the limitations previously set by Tax Reform by providing that tax NOLs arising in a tax year beginning in 2018, 2019, or 2020 can be carried back five years. This provision allows the taxpayer to recover taxes previously paid at a 35 percent federal income tax rate during

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

tax years prior to 2018. In addition, the CARES Act removed the taxable income limitation to allow a tax NOL to fully offset taxable income for tax years beginning before January 1, 2021.

- Increased the deductibility of interest expense from 30 percent to 50 percent of adjusted taxable income for 2019 and 2020. Also, a taxpayer can elect to use its 2019 adjusted taxable income in 2020 to determine the deductible amount of interest expense in that year.

Our income tax benefit for the year ended December 31, 2020 included a tax benefit of \$360 million attributable to the tax NOL carryback provided under the CARES Act for our 2020 tax NOL to our 2015 tax year in which we paid federal income taxes at a 35 percent tax rate. The variation in the customary relationship of our effective tax rate to the U.S. federal statutory rate for the year ended December 31, 2020 was primarily due to this income tax benefit.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

17. EARNINGS (LOSS) PER COMMON SHARE

Earnings (loss) per common share were computed as follows (dollars and shares in millions, except per share amounts):

	Year Ended December 31,		
	2020	2019	2018
Earnings (loss) per common share			
Net income (loss) attributable to Valero stockholders	\$ (1,421)	\$ 2,422	\$ 3,122
Less: Income allocated to participating securities	5	7	9
Net income (loss) available to common shareholders	<u>\$ (1,426)</u>	<u>\$ 2,415</u>	<u>\$ 3,113</u>
Weighted-average common shares outstanding	407	413	426
Earnings (loss) per common share	<u>\$ (3.50)</u>	<u>\$ 5.84</u>	<u>\$ 7.30</u>
Earnings (loss) per common share – assuming dilution			
Net income (loss) attributable to Valero stockholders	\$ (1,421)	\$ 2,422	\$ 3,122
Less: Income allocated to participating securities	5	7	9
Net income (loss) available to common shareholders	<u>\$ (1,426)</u>	<u>\$ 2,415</u>	<u>\$ 3,113</u>
Weighted-average common shares outstanding	407	413	426
Effect of dilutive securities	—	1	2
Weighted-average common shares outstanding – assuming dilution	<u>407</u>	<u>414</u>	<u>428</u>
Earnings (loss) per common share – assuming dilution	<u>\$ (3.50)</u>	<u>\$ 5.84</u>	<u>\$ 7.29</u>

Participating securities include restricted stock and performance awards granted under our 2020 OSIP or our 2011 OSIP. Dilutive securities include participating securities as well as outstanding stock options granted under our 2020 OSIP or our 2011 OSIP.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

18. REVENUES AND SEGMENT INFORMATION

Revenue from Contracts with Customers

Disaggregation of Revenue

Revenue is presented in the table below under “*Segment Information*” disaggregated by product because this is the level of disaggregation that management has determined to be beneficial to users of our financial statements.

Contract Balances

Contract balances were as follows (in millions):

	December 31,		Decrease
	2020	2019	
Receivables from contracts with customers, included in receivables, net	\$ 3,642	\$ 5,610	\$ (1,968)
Contract liabilities, included in accrued expenses	55	55	—

Receivables from contracts with customers is a component of “receivables, net” as presented in Note 4. The decrease in “receivables, net” is described in Note 19.

During the years ended December 31, 2020, 2019, and 2018, we recognized as revenue \$50 million, \$31 million, and \$54 million, respectively, that was included in contract liabilities as of December 31, 2019, 2018, and 2017, respectively.

Remaining Performance Obligations

We have spot and term contracts with customers, the majority of which are spot contracts with no remaining performance obligations. We do not disclose remaining performance obligations for contracts that have terms of one year or less. The transaction price for our remaining term contracts includes a fixed component and variable consideration (i.e., a commodity price), both of which are allocated entirely to a wholly unsatisfied promise to transfer a distinct good that forms part of a single performance obligation. The fixed component is not material and the variable consideration is highly uncertain. Therefore, as of December 31, 2020, we have not disclosed the aggregate amount of the transaction price allocated to our remaining performance obligations.

Segment Information

We have three reportable segments — refining, renewable diesel, and ethanol. Each segment is a strategic business unit that offers different products and services by employing unique technologies and marketing strategies and whose operations and operating performance are managed and evaluated separately. Operating performance is measured based on the operating income generated by the segment, which includes revenues and expenses that are directly attributable to the management of the respective segment. Intersegment sales are generally derived from transactions made at prevailing market rates. The following is a description of each segment’s business operations.

- The *refining segment* includes the operations of our petroleum refineries, the associated marketing activities, and logistics assets that support our refining operations. The principal

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

products manufactured by our refineries and sold by this segment include gasolines and blendstocks, distillates, and other products.

- The *renewable diesel segment* represents the operations of DGD, our consolidated joint venture as discussed in Note 13. The principal product manufactured by DGD and sold by this segment is renewable diesel. This segment sells some renewable diesel to the refining segment, which is then sold to that segment's customers.
- The *ethanol segment* includes the operations of our ethanol plants, the associated marketing activities, and logistics assets that support our ethanol operations. The principal products manufactured by our ethanol plants are ethanol and distillers grains. This segment sells some ethanol to the refining segment for blending into gasoline, which is sold to that segment's customers as a finished gasoline product.

Operations that are not included in any of the reportable segments are included in the corporate category.

The following tables reflect information about our operating income (loss) and total expenditures for long-lived assets by reportable segment (in millions):

	Refining	Renewable Diesel	Ethanol	Corporate and Eliminations	Total
Year ended December 31, 2020					
Revenues:					
Revenues from external customers	\$ 60,840	\$ 1,055	\$ 3,017	\$ —	\$ 64,912
Intersegment revenues	8	212	226	(446)	—
Total revenues	60,848	1,267	3,243	(446)	64,912
Cost of sales:					
Cost of materials and other	56,093	500	2,784	(444)	58,933
LCM inventory valuation adjustment	(19)	—	—	—	(19)
Operating expenses (excluding depreciation and amortization expense reflected below)	3,944	85	406	—	4,435
Depreciation and amortization expense	2,138	44	121	—	2,303
Total cost of sales	62,156	629	3,311	(444)	65,652
Other operating expenses	34	—	1	—	35
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	756	756
Depreciation and amortization expense	—	—	—	48	48
Operating income (loss) by segment	<u>\$ (1,342)</u>	<u>\$ 638</u>	<u>\$ (69)</u>	<u>\$ (806)</u>	<u>\$ (1,579)</u>
Total expenditures for long-lived assets (a)	\$ 1,838	\$ 548	\$ 23	\$ 27	\$ 2,436

(a) See note on page 124.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	Refining	Renewable Diesel	Ethanol	Corporate and Eliminations	Total
Year ended December 31, 2019					
Revenues:					
Revenues from external customers	\$ 103,746	\$ 970	\$ 3,606	\$ 2	\$ 108,324
Intersegment revenues	18	247	231	(496)	—
Total revenues	<u>103,764</u>	<u>1,217</u>	<u>3,837</u>	<u>(494)</u>	<u>108,324</u>
Cost of sales:					
Cost of materials and other	93,371	360	3,239	(494)	96,476
Operating expenses (excluding depreciation and amortization expense reflected below)	4,289	75	504	—	4,868
Depreciation and amortization expense	2,062	50	90	—	2,202
Total cost of sales	<u>99,722</u>	<u>485</u>	<u>3,833</u>	<u>(494)</u>	<u>103,546</u>
Other operating expenses	20	—	1	—	21
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	868	868
Depreciation and amortization expense	—	—	—	53	53
Operating income by segment	<u>\$ 4,022</u>	<u>\$ 732</u>	<u>\$ 3</u>	<u>\$ (921)</u>	<u>\$ 3,836</u>
Total expenditures for long-lived assets (a)	<u>\$ 2,581</u>	<u>\$ 160</u>	<u>\$ 47</u>	<u>\$ 58</u>	<u>\$ 2,846</u>
Year ended December 31, 2018					
Revenues:					
Revenues from external customers	\$ 113,093	\$ 508	\$ 3,428	\$ 4	\$ 117,033
Intersegment revenues	25	170	210	(405)	—
Total revenues	<u>113,118</u>	<u>678</u>	<u>3,638</u>	<u>(401)</u>	<u>117,033</u>
Cost of sales:					
Cost of materials and other	101,866	262	3,008	(404)	104,732
Operating expenses (excluding depreciation and amortization expense reflected below)	4,154	66	470	—	4,690
Depreciation and amortization expense	1,910	29	78	—	2,017
Total cost of sales	<u>107,930</u>	<u>357</u>	<u>3,556</u>	<u>(404)</u>	<u>111,439</u>
Other operating expenses	45	—	—	—	45
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	925	925
Depreciation and amortization expense	—	—	—	52	52
Operating income by segment	<u>\$ 5,143</u>	<u>\$ 321</u>	<u>\$ 82</u>	<u>\$ (974)</u>	<u>\$ 4,572</u>
Total expenditures for long-lived assets (a)	<u>\$ 2,767</u>	<u>\$ 192</u>	<u>\$ 373</u>	<u>\$ 44</u>	<u>\$ 3,376</u>

(a) Total expenditures for long-lived assets includes amounts related to capital expenditures; deferred turnaround and catalyst costs; and property, plant, and equipment for acquisitions.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table provides a disaggregation of revenues from external customers for our principal products by reportable segment (in millions):

	Year Ended December 31,		
	2020	2019	2018
Refining:			
Gasolines and blendstocks	\$ 26,278	\$ 42,798	\$ 46,596
Distillates	28,234	51,942	55,037
Other product revenues	6,328	9,006	11,460
Total refining revenues	60,840	103,746	113,093
Renewable diesel:			
Renewable diesel	1,055	970	508
Ethanol:			
Ethanol	2,353	2,889	2,713
Distillers grains	664	717	715
Total ethanol revenues	3,017	3,606	3,428
Corporate – other revenues	—	2	4
Revenues	\$ 64,912	\$ 108,324	\$ 117,033

Revenues by geographic area are shown in the following table (in millions). The geographic area is based on location of customer and no customer accounted for 10 percent or more of our revenues.

	Year Ended December 31,		
	2020	2019	2018
U.S.	\$ 45,174	\$ 77,173	\$ 82,992
Canada	4,294	7,915	9,211
U.K. and Ireland	9,268	13,584	15,208
Other countries	6,176	9,652	9,622
Revenues	\$ 64,912	\$ 108,324	\$ 117,033

Long-lived assets include property, plant, and equipment and certain long-lived assets included in “deferred charges and other assets, net.” Long-lived assets by geographic area consisted of the following (in millions):

	December 31,	
	2020	2019
U.S.	\$ 28,184	\$ 27,485
Canada	1,877	1,886
U.K. and Ireland	1,353	1,232
Mexico and Peru	738	497
Total long-lived assets	\$ 32,152	\$ 31,100

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Total assets by reportable segment were as follows (in millions):

	December 31,	
	2020	2019
Refining	\$ 42,939	\$ 46,613
Renewable diesel	1,659	1,412
Ethanol	1,728	2,069
Corporate and eliminations	5,448	3,770
Total assets	\$ 51,774	\$ 53,864

As of December 31, 2020 and 2019, our investments in unconsolidated joint ventures accounted for under the equity method were \$972 million and \$942 million, respectively, all of which related to the refining segment and are reflected in “deferred charges and other assets, net” as presented in Note 8.

19. SUPPLEMENTAL CASH FLOW INFORMATION

In order to determine net cash provided by operating activities, net income (loss) is adjusted by, among other things, changes in current assets and current liabilities as follows (in millions):

	Year Ended December 31,		
	2020	2019	2018
Decrease (increase) in current assets:			
Receivables, net	\$ 2,773	\$ (1,041)	\$ (460)
Inventories	1,007	(385)	(197)
Prepaid expenses and other	101	—	(74)
Increase (decrease) in current liabilities:			
Accounts payable	(4,068)	1,534	304
Accrued expenses	48	(27)	(113)
Taxes other than income taxes payable	37	60	(73)
Income taxes payable	(243)	153	(684)
Changes in current assets and current liabilities	\$ (345)	\$ 294	\$ (1,297)

Changes in current assets and current liabilities for the year ended December 31, 2020 were as follows:

- the decrease in receivables was due to (i) a decrease of \$3.3 billion as a result of a decrease in sales volumes combined with a decrease in commodity prices in December 2020 compared to December 2019, (ii) the collection of \$449 million for a blender’s tax credit receivable attributable to volumes blended during 2019 and 2018, and (iii) an increase in income taxes receivable of \$1.0 billion primarily due to the recognition of a current income tax benefit;
- the decrease in inventories was primarily due to a reduction of higher-cost inventory volumes in our refining segment in December 2020 compared to December 2019; and

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- the decrease in accounts payable was due to a decrease in crude oil and other feedstock volumes purchased combined with a decrease in commodity prices in December 2020 compared to December 2019.

Changes in current assets and current liabilities for the year ended December 31, 2019 were as follows:

- the increase in receivables was due to (i) an increase in commodity prices and sales volumes in December 2019 compared to December 2018, (ii) a receivable of \$449 million for the blender's tax credit attributable to volumes blended during 2019 and 2018, and (iii) an income tax refund of \$348 million, including interest, associated with the settlement of the combined audit related to our U.S. federal income tax returns for 2010 and 2011;
- the increase in inventories was due to an increase in commodity prices and higher inventory levels in December 2019 compared to December 2018;
- the increase in accounts payable was due to an increase in commodity prices in December 2019 compared to December 2018 combined with an increase in crude oil and other feedstock volumes purchased and the timing of payments of invoices; and
- the increase in income taxes payable was primarily due to higher pre-tax income in the fourth quarter of 2019.

Changes in current assets and current liabilities for the year ended December 31, 2018 were as follows:

- the increase in receivables was due to an increase in sales volumes, partially offset by a decrease in commodity prices in December 2018 compared to December 2017;
- the increase in inventories was primarily due to higher inventory levels in December 2018 compared to December 2017;
- the increase in accounts payable was due to an increase in crude oil and other feedstock volumes purchased, partially offset by a decrease in commodity prices in December 2018 compared to December 2017;
- the decrease in accrued expenses was mainly due to the timing of payments on our environmental compliance program obligations; and
- the decrease in income taxes payable was primarily due to (i) \$527 million of payments in early 2018 related to 2017 tax liabilities and (ii) \$181 million of payments in late 2018 that were applied to 2019 tax liabilities.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Cash flows related to interest and income taxes were as follows (in millions):

	Year Ended December 31,		
	2020	2019	2018
Interest paid in excess of amount capitalized, including interest on finance leases	\$ 526	\$ 452	\$ 463
Income taxes paid (refunded), net (see Note 16)	203	(116)	1,361

Supplemental cash flow information related to our operating and finance leases was as follows (in millions):

	Year Ended December 31,			
	2020		2019	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows	\$ 444	\$ 97	\$ 441	\$ 50
Investing cash flows	1	—	1	—
Financing cash flows	—	80	—	40
Changes in lease balances resulting from new and modified leases (a)	263	950	1,756	239

(a) Noncash activity for the year ended December 31, 2020 primarily included approximately \$800 million for a finance lease ROU asset and related liability recognized in connection with the terminaling agreement with MVP described in Note 6. Noncash activity for the year ended December 31, 2019 included \$1.3 billion for operating lease ROU assets and related liabilities recorded on January 1, 2019 upon adoption of Topic 842.

Prior to our adoption of Topic 842 in 2019, we were considered the accounting owner of the MVP Terminal during its construction due to our membership interest in MVP and because we determined that the terminaling agreement was a capital lease. Accordingly, as of December 31, 2018, we had recorded an asset of \$539 million in property, plant, and equipment representing 100 percent of the construction costs incurred by MVP, as well as capitalized interest incurred by us, and a long-term liability of \$292 million payable to Magellan. The amounts recorded for the portion of the construction costs associated with the payable to Magellan were noncash investing and financing activities, respectively, for the year ended December 31, 2018. Noncash investing and financing activities for the year ended December 31, 2018 also included the recognition of finance lease assets and related obligations primarily for the lease of storage tanks.

On January 1, 2019, as a result of our adoption of Topic 842, we derecognized the asset and liability related to MVP discussed above and recorded our equity investment in MVP of \$247 million, which is included in “deferred charges and other assets, net.” These amounts were noncash investing and financing activities for the year ended December 31, 2019.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

There were no significant noncash investing and financing activities during the year ended December 31, 2020, except as noted in the table above.

20. FAIR VALUE MEASUREMENTS

General

U.S. GAAP requires or permits certain assets and liabilities to be measured at fair value on a recurring or nonrecurring basis in our balance sheets, and those assets and liabilities are presented below under “*Recurring Fair Value Measurements*” and “*Nonrecurring Fair Value Measurements*.” Assets and liabilities measured at fair value on a recurring basis, such as derivative financial instruments, are measured at fair value at the end of each reporting period. Assets and liabilities measured at fair value on a nonrecurring basis, such as the impairment of property, plant and equipment, are measured at fair value in particular circumstances.

U.S. GAAP also requires the disclosure of the fair values of financial instruments when an option to elect fair value accounting has been provided, but such election has not been made. A debt obligation is an example of such a financial instrument. The disclosure of the fair values of financial instruments not recognized at fair value in our balance sheet is presented below under “*Other Financial Instruments*.”

U.S. GAAP provides a framework for measuring fair value and establishes a three-level fair value hierarchy that prioritizes inputs to valuation techniques based on the degree to which objective prices in external active markets are available to measure fair value. The following is a description of each of the levels of the fair value hierarchy.

- *Level 1* - Observable inputs, such as unadjusted quoted prices in active markets for identical assets or liabilities.
- *Level 2* - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.
- *Level 3* - Unobservable inputs for the asset or liability. Unobservable inputs reflect our own assumptions about what market participants would use to price the asset or liability. The inputs are developed based on the best information available in the circumstances, which might include occasional market quotes or sales of similar instruments or our own financial data such as internally developed pricing models, discounted cash flow methodologies, as well as instruments for which the fair value determination requires significant judgment.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Recurring Fair Value Measurements

The following tables present information (in millions) about our assets and liabilities recognized at their fair values in our balance sheets categorized according to the fair value hierarchy of the inputs utilized by us to determine the fair values as of December 31, 2020 and 2019.

We have elected to offset the fair value amounts recognized for multiple similar derivative contracts executed with the same counterparty, including any related cash collateral assets or obligations as shown below; however, fair value amounts by hierarchy level are presented in the following tables on a gross basis. We have no derivative contracts that are subject to master netting arrangements that are reflected gross on the balance sheet.

	December 31, 2020							
	Fair Value Hierarchy			Total Gross Fair Value	Effect of Counter- party Netting	Effect of Cash Collateral Netting	Net Carrying Value on Balance Sheet	Cash Collateral Paid or Received Not Offset
	Level 1	Level 2	Level 3					
Assets								
Commodity derivative contracts	\$ 403	\$ —	\$ —	\$ 403	\$ (373)	\$ (18)	\$ 12	\$ —
Physical purchase contracts	—	13	—	13	n/a	n/a	13	n/a
Investments of certain benefit plans	74	—	8	82	n/a	n/a	82	n/a
Total	<u>\$ 477</u>	<u>\$ 13</u>	<u>\$ 8</u>	<u>\$ 498</u>	<u>\$ (373)</u>	<u>\$ (18)</u>	<u>\$ 107</u>	
Liabilities								
Commodity derivative contracts	\$ 405	\$ —	\$ —	\$ 405	\$ (373)	\$ (32)	\$ —	\$ (44)
Environmental credit obligations	—	96	—	96	n/a	n/a	96	n/a
Foreign currency contracts	4	—	—	4	n/a	n/a	4	n/a
Total	<u>\$ 409</u>	<u>\$ 96</u>	<u>\$ —</u>	<u>\$ 505</u>	<u>\$ (373)</u>	<u>\$ (32)</u>	<u>\$ 100</u>	

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2019								
	Fair Value Hierarchy			Total Gross Fair Value	Effect of Counter- party Netting	Effect of Cash Collateral Netting	Net Carrying Value on Balance Sheet	Cash Collateral Paid or Received Not Offset
	Level 1	Level 2	Level 3					
Assets								
Commodity derivative contracts	\$ 617	\$ —	\$ —	\$ 617	\$ (612)	\$ —	\$ 5	\$ —
Foreign currency contracts	27	—	—	27	n/a	n/a	27	n/a
Investments of certain benefit plans	65	—	9	74	n/a	n/a	74	n/a
Total	<u>\$ 709</u>	<u>\$ —</u>	<u>\$ 9</u>	<u>\$ 718</u>	<u>\$ (612)</u>	<u>\$ —</u>	<u>\$ 106</u>	
Liabilities								
Commodity derivative contracts	\$ 668	\$ —	\$ —	\$ 668	\$ (612)	\$ (56)	\$ —	\$ (84)
Environmental credit obligations	—	2	—	2	n/a	n/a	2	n/a
Physical purchase contracts	—	3	—	3	n/a	n/a	3	n/a
Foreign currency contracts	10	—	—	10	n/a	n/a	10	n/a
Total	<u>\$ 678</u>	<u>\$ 5</u>	<u>\$ —</u>	<u>\$ 683</u>	<u>\$ (612)</u>	<u>\$ (56)</u>	<u>\$ 15</u>	

A description of our assets and liabilities recognized at fair value along with the valuation methods and inputs we used to develop their fair value measurements are as follows:

- Commodity derivative contracts consist primarily of exchange-traded futures, which are used to reduce the impact of price volatility on our results of operations and cash flows as discussed in Note 21. These contracts are measured at fair value using a market approach based on quoted prices from the commodity exchange and are categorized in Level 1 of the fair value hierarchy.
- Physical purchase contracts represent the fair value of fixed-price corn purchase contracts. The fair values of these purchase contracts are measured using a market approach based on quoted prices from the commodity exchange or an independent pricing service and are categorized in Level 2 of the fair value hierarchy.
- Investments of certain benefit plans consist of investment securities held by trusts for the purpose of satisfying a portion of our obligations under certain U.S. nonqualified benefit plans. The plan assets categorized in Level 1 of the fair value hierarchy are measured at fair value using a market approach based on quoted prices from national securities exchanges. The plan assets categorized in Level 3 of the fair value hierarchy represent insurance contracts, the fair value of which is provided by the insurer.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- Foreign currency contracts consist of foreign currency exchange and purchase contracts and foreign currency swap agreements related to our international operations to manage our exposure to exchange rate fluctuations on transactions denominated in currencies other than the local (functional) currencies of our operations. These contracts are valued based on quoted foreign currency exchange rates and are categorized in Level 1 of the fair value hierarchy.
- Environmental credit obligations represent our liability for the purchase of (i) biofuel credits (primarily RINs in the U.S.) needed to satisfy our obligation to blend biofuels into the products we produce and (ii) emission credits under the *California Global Warming Solutions Act* (the California cap-and-trade system, also known as AB 32) and similar programs, (collectively, the cap-and-trade systems). To the degree we are unable to blend biofuels (such as ethanol and biodiesel) at percentages required under the biofuel programs, we must purchase biofuel credits to comply with these programs. Under the cap-and-trade systems, we must purchase emission credits to comply with these systems. These programs are described in Note 21 under “*Risk Management Activities by Type of Risk—Environmental Compliance Program Price Risk.*” The liability for environmental credits is based on our deficit for such credits as of the balance sheet date, if any, after considering any credits acquired or under contract, and is equal to the product of the credits deficit and the market price of these credits as of the balance sheet date. The environmental credit obligations are categorized in Level 2 of the fair value hierarchy and are measured at fair value using the market approach based on quoted prices from an independent pricing service.

There were no transfers into or out of Level 3 for assets and liabilities held as of December 31, 2020 and 2019 that were measured at fair value on a recurring basis.

There was no significant activity during the years ended December 31, 2020, 2019, and 2018 related to the fair value amounts categorized in Level 3 as of December 31, 2020 and 2019.

Nonrecurring Fair Value Measurements

There were no assets or liabilities that were measured at fair value on a nonrecurring basis as of December 31, 2020 and 2019.

Other Financial Instruments

Financial instruments that we recognize in our balance sheets at their carrying amounts are shown in the following table along with their associated fair values (in millions):

	Fair Value Hierarchy	December 31, 2020		December 31, 2019	
		Carrying Amount	Fair Value	Carrying Amount	Fair Value
Financial assets					
Cash and cash equivalents	Level 1	\$ 3,313	\$ 3,313	\$ 2,583	\$ 2,583
Financial liabilities					
Debt (excluding finance leases)	Level 2	13,013	15,103	8,881	10,583

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

21. PRICE RISK MANAGEMENT ACTIVITIES

We are exposed to market risks primarily related to the volatility in the price of commodities, foreign currency exchange rates, and the price of credits needed to comply with various government and regulatory programs. We enter into derivative instruments to manage some of these risks, including derivative instruments related to the various commodities we purchase or produce, and foreign currency exchange and purchase contracts, as described below under “*Risk Management Activities by Type of Risk.*” These derivative instruments are recorded as either assets or liabilities measured at their fair values (see Note 20), as summarized below under “*Fair Values of Derivative Instruments.*” The effect of these derivative instruments on our income and other comprehensive income (loss) is summarized below under “*Effect of Derivative Instruments on Income and Other Comprehensive Income (Loss).*”

Risk Management Activities by Type of Risk

Commodity Price Risk

We are exposed to market risks related to the volatility in the price of feedstocks (primarily crude oil and corn), the products we produce (primarily refined petroleum products), and natural gas used in our operations. To reduce the impact of price volatility on our results of operations and cash flows, we use commodity derivative instruments, such as futures and options. Our positions in commodity derivative instruments are monitored and managed on a daily basis by our risk control group to ensure compliance with our stated risk management policy that has been approved by our board of directors.

We primarily use commodity derivative instruments as cash flow hedges and economic hedges. Our objectives for entering into each type of hedge is described below.

- *Cash flow hedges* – The objective of our cash flow hedges is to lock in the price of forecasted purchases and/or product sales at existing market prices that we deem favorable.
- *Economic hedges* – Our objectives for holding economic hedges are to (i) manage price volatility in certain feedstock and product inventories and (ii) lock in the price of forecasted purchases and/or product sales at existing market prices that we deem favorable.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

As of December 31, 2020, we had the following outstanding commodity derivative instruments that were used as cash flow hedges and economic hedges, as well as commodity derivative instruments related to the physical purchase of corn at a fixed price. The information presents the notional volume of outstanding contracts by type of instrument and year of maturity (volumes in thousands of barrels, except corn contracts that are presented in thousands of bushels).

	Notional Contract Volumes by Year of Maturity	
	2021	2022
Derivatives designated as cash flow hedges		
Refined petroleum products:		
Futures – long	334	—
Futures – short	1,364	—
Derivatives designated as economic hedges		
Crude oil and refined petroleum products:		
Futures – long	53,205	1
Futures – short	50,518	—
Corn:		
Futures – long	49,840	10
Futures – short	78,135	155
Physical contracts – long	27,144	145

Foreign Currency Risk

We are exposed to exchange rate fluctuations on transactions related to our international operations that are denominated in currencies other than the local (functional) currencies of those operations. To manage our exposure to these exchange rate fluctuations, we use foreign currency contracts. These contracts are not designated as hedging instruments for accounting purposes and therefore are classified as economic hedges. As of December 31, 2020, we had foreign currency contracts to purchase \$325 million of U.S. dollars and \$1.6 billion of U.S. dollar equivalent Canadian dollars. Of these commitments, \$1.1 billion matured on or before February 16, 2021 and the remaining \$800 million will mature by April 15, 2021.

Environmental Compliance Program Price Risk

We are exposed to market risk related to the volatility in the price of credits needed to comply with various governmental and regulatory environmental compliance programs. To manage this risk, we enter into contracts to purchase these credits when prices are deemed favorable. Some of these contracts are derivative instruments; however, we elect the normal purchase exception and do not record these contracts at their fair values. Certain of these programs require us to blend biofuels into the products we produce, and we are subject to such programs in most of the countries in which we operate. These countries set annual quotas for the percentage of biofuels that must be blended into the motor fuels consumed in these countries. As a producer of motor fuels from petroleum, we are obligated to blend biofuels into the motor fuels we produce at a rate that is at least equal to the applicable quota. To the degree we are unable to blend at the applicable rate, we must purchase biofuel credits (primarily RINs in

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

the U.S.). We are exposed to the volatility in the market price of these credits, and we manage that risk by purchasing biofuel credits when prices are deemed favorable. For the years ended December 31, 2020, 2019, and 2018, the cost of meeting our obligations under these compliance programs was \$648 million, \$318 million, and \$536 million, respectively. These amounts are reflected in cost of materials and other.

We are subject to additional requirements under GHG emission programs, including the cap-and-trade systems, as discussed in Note 20. Under these cap-and-trade systems, we purchase various GHG emission credits available on the open market. Therefore, we are exposed to the volatility in the market price of these credits. The cost to implement certain provisions of the cap-and-trade systems are significant; however, we recovered substantially all of these costs from our customers for the years ended December 31, 2020, 2019, and 2018 and expect to continue to recover the majority of these costs in the future. For the years ended December 31, 2020, 2019, and 2018, the net cost of meeting our obligations under these compliance programs was immaterial.

Fair Values of Derivative Instruments

The following tables provide information about the fair values of our derivative instruments as of December 31, 2020 and 2019 (in millions) and the line items in the balance sheets in which the fair values are reflected. See Note 20 for additional information related to the fair values of our derivative instruments.

As indicated in Note 20, we net fair value amounts recognized for multiple similar derivative contracts executed with the same counterparty under master netting arrangements, including cash collateral assets and obligations. The following tables, however, are presented on a gross asset and gross liability basis, which results in the reflection of certain assets in liability accounts and certain liabilities in asset accounts.

	Balance Sheet Location	December 31, 2020		December 31, 2019	
		Asset Derivatives	Liability Derivatives	Asset Derivatives	Liability Derivatives
Derivatives designated as hedging instruments					
Commodity contracts	Receivables, net	\$ 4	\$ 17	\$ 9	\$ 20
Derivatives not designated as hedging instruments					
Commodity contracts	Receivables, net	\$ 399	\$ 388	\$ 608	\$ 648
Physical purchase contracts	Inventories	13	—	—	3
Foreign currency contracts	Receivables, net	—	—	27	—
Foreign currency contracts	Accrued expenses	—	4	—	10
Total		\$ 412	\$ 392	\$ 635	\$ 661

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Market Risk

Our price risk management activities involve the receipt or payment of fixed price commitments into the future. These transactions give rise to market risk, which is the risk that future changes in market conditions may make an instrument less valuable. We closely monitor and manage our exposure to market risk on a daily basis in accordance with policies approved by our board of directors. Market risks are monitored by our risk control group to ensure compliance with our stated risk management policy. We do not require any collateral or other security to support derivative instruments into which we enter. We also do not have any derivative instruments that require us to maintain a minimum investment-grade credit rating.

Effect of Derivative Instruments on Income and Other Comprehensive Income (Loss)

The following table provides information about the gain (loss) recognized in income and other comprehensive income (loss) due to fair value adjustments of our cash flow hedges (in millions):

Derivatives in Cash Flow Hedging Relationships	Location of Gain (Loss) Recognized in Income on Derivatives	Year Ended December 31,		
		2020	2019	2018
Commodity contracts:				
Gain (loss) recognized in other comprehensive income (loss) on derivatives	N/A	\$ 38	\$ (6)	\$ —
Gain reclassified from accumulated other comprehensive loss into income	Revenues	34	2	—

For cash flow hedges, no component of any derivative instrument's gains or losses was excluded from the assessment of hedge effectiveness for the years ended December 31, 2020, 2019, and 2018. For the years ended December 31, 2020, 2019, and 2018, cash flow hedges primarily related to forward sales of renewable diesel. The estimated deferred after-tax loss that is expected to be reclassified into revenues over the next 12 months as a result of the hedged transactions that are forecasted to occur as of December 31, 2020 was immaterial. For the years ended December 31, 2020, 2019, and 2018, there were no amounts reclassified from accumulated other comprehensive loss into income as a result of the discontinuance of cash flow hedge accounting. The changes in accumulated other comprehensive loss by component, net of tax, for the years ended December 31, 2020, 2019, and 2018 are described in Note 12.

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table provides information about the gain (loss) recognized in income on our derivative instruments with respect to our economic hedges and our foreign currency hedges and the line items in the statements of income in which such gains (losses) are reflected (in millions):

Derivatives Not Designated as Hedging Instruments	Location of Gain (Loss) Recognized in Income on Derivatives	Year Ended December 31,		
		2020	2019	2018
Commodity contracts	Revenues	\$ —	\$ 5	\$ —
Commodity contracts	Cost of materials and other	99	(68)	(165)
Commodity contracts	Operating expenses (excluding depreciation and amortization expense)	2	—	7
Foreign currency contracts	Cost of materials and other	27	(21)	56
Foreign currency contracts	Other income, net	(13)	75	(43)

VALERO ENERGY CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

22. QUARTERLY FINANCIAL DATA (Unaudited)

The following tables summarize quarterly financial data for the years ended December 31, 2020 and 2019 (in millions, except per share amounts):

	2020 Quarter Ended			
	March 31	June 30	September 30	December 31
	(b)	(b)	(b) (c)	(c)
Revenues	\$ 22,102	\$ 10,397	\$ 15,809	\$ 16,604
Gross profit (loss) (a)	(2,085)	1,973	(398)	(230)
Operating income (loss)	(2,277)	1,789	(621)	(470)
Net income (loss)	(1,754)	1,335	(379)	(309)
Net income (loss) attributable to Valero Energy Corporation stockholders	(1,851)	1,253	(464)	(359)
Earnings (loss) per common share	(4.54)	3.07	(1.14)	(0.88)
Earnings (loss) per common share – assuming dilution	(4.54)	3.07	(1.14)	(0.88)

	2019 Quarter Ended			
	March 31	June 30	September 30	December 31
Revenues	\$ 24,263	\$ 28,933	\$ 27,249	\$ 27,879
Gross profit (a)	533	1,123	1,119	2,003
Operating income	308	908	881	1,739
Net income	167	648	639	1,330
Net income attributable to Valero Energy Corporation stockholders	141	612	609	1,060
Earnings per common share	0.34	1.47	1.48	2.58
Earnings per common share – assuming dilution	0.34	1.47	1.48	2.58

(a) Gross profit is calculated as revenues less total cost of sales.

(b) The market value of our inventories accounted for under the LIFO method fell below their historical cost on an aggregate basis as of March 31, 2020. As a result, we recorded an LCM inventory valuation adjustment of \$2.5 billion in March 2020 as described in Note 5. The market value of our LIFO inventories improved due to the subsequent recovery in market prices, which resulted in a reversal of \$2.2 billion in the quarter ended June 30, 2020 and the remaining amount in the quarter ended September 30, 2020.

(c) We recorded a charge of \$326 million in September 2020 due to the expected liquidation of LIFO inventory layers as described in Note 5. We recognized a benefit of \$102 million in December 2020 to adjust the \$326 million estimate to the \$224 million actual charge for the year ended December 31, 2020.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures. Our management has evaluated, with the participation of our principal executive officer and principal financial officer, the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934) as of the end of the period covered by this report, and has concluded that our disclosure controls and procedures were effective as of December 31, 2020.

Internal Control over Financial Reporting.

(a) Management’s Report on Internal Control over Financial Reporting.

The management report on Valero’s internal control over financial reporting required by Item 9A appears in Item 8 on page 61 of this report, and is incorporated herein by reference.

(b) Attestation Report of the Independent Registered Public Accounting Firm.

KPMG LLP’s report on Valero’s internal control over financial reporting appears in Item 8 beginning on page 64 of this report, and is incorporated herein by reference.

(c) Changes in Internal Control over Financial Reporting.

There has been no change in our internal control over financial reporting that occurred during our last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEMS 10-14.

The information required by Items 10 through 14 of Form 10-K is incorporated herein by reference to the definitive proxy statement for our 2021 annual meeting of stockholders. We expect to file the proxy statement with the U.S. SEC on or before March 31, 2021.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) **1. Financial Statements.** The following consolidated financial statements of Valero Energy Corporation and its subsidiaries are included in Part II, Item 8 of this Form 10-K:

	Page
Management's report on internal control over financial reporting	61
Reports of independent registered public accounting firm	62
Consolidated balance sheets as of December 31, 2020 and 2019	66
Consolidated statements of income for the years ended December 31, 2020, 2019, and 2018	67
Consolidated statements of comprehensive income for the years ended December 31, 2020, 2019, and 2018	68
Consolidated statements of equity for the years ended December 31, 2020, 2019, and 2018	69
Consolidated statements of cash flows for the years ended December 31, 2020, 2019, and 2018	70
Notes to consolidated financial statements	71

2. Financial Statement Schedules and Other Financial Information. No financial statement schedules are submitted because either they are inapplicable or because the required information is included in the consolidated financial statements or notes thereto.

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

- [++2.01](#) — [Agreement and Plan of Merger, dated as of October 18, 2018, by and among Valero Energy Corporation; Forest Merger Sub, LLC; Valero Energy Partners LP; and Valero Energy Partners GP LLC—incorporated by reference to Exhibit 2.1 to Valero's Current Report on Form 8-K dated and filed October 18, 2018 \(SEC File No. 001-13175\).](#)
- 3.01 — Amended and Restated Certificate of Incorporation of Valero Energy Corporation, formerly known as Valero Refining and Marketing Company—incorporated by reference to Exhibit 3.1 to Valero's Registration Statement on Form S-1 (SEC File No. 333-27013) filed May 13, 1997.
- [3.02](#) — [Certificate of Amendment \(July 31, 1997\) to Restated Certificate of Incorporation of Valero Energy Corporation—incorporated by reference to Exhibit 3.02 to Valero's Annual Report on Form 10-K for the year ended December 31, 2003 \(SEC File No. 001-13175\).](#)
- [3.03](#) — [Certificate of Merger of Ultramar Diamond Shamrock Corporation with and into Valero Energy Corporation dated December 31, 2001—incorporated by reference to Exhibit 3.03 to Valero's Annual Report on Form 10-K for the year ended December 31, 2003 \(SEC File No. 001-13175\).](#)
- [3.04](#) — [Amendment \(effective December 31, 2001\) to Restated Certificate of Incorporation of Valero Energy Corporation—incorporated by reference to Exhibit 3.1 to Valero's Current Report on Form 8-K dated December 31, 2001, and filed January 11, 2002 \(SEC File No. 001-13175\).](#)
- [3.05](#) — [Second Certificate of Amendment \(effective September 17, 2004\) to Restated Certificate of Incorporation of Valero Energy Corporation—incorporated by reference to Exhibit 3.04 to Valero's Quarterly Report on Form 10-Q for the quarter ended September 30, 2004 \(SEC File No. 001-13175\).](#)
- [3.06](#) — [Certificate of Merger of Premcor Inc. with and into Valero Energy Corporation effective September 1, 2005—incorporated by reference to Exhibit 2.01 to Valero's Quarterly Report on Form 10-Q for the quarter ended September 30, 2005 \(SEC File No. 001-13175\).](#)
- [3.07](#) — [Third Certificate of Amendment \(effective December 2, 2005\) to Restated Certificate of Incorporation of Valero Energy Corporation—incorporated by reference to Exhibit 3.07 to Valero's Annual Report on Form 10-K for the year ended December 31, 2005 \(SEC File No. 001-13175\).](#)

- [3.08](#) — [Fourth Certificate of Amendment \(effective May 24, 2011\) to Restated Certificate of Incorporation of Valero Energy Corporation—incorporated by reference to Exhibit 4.8 to Valero’s Current Report on Form 8-K dated and filed May 24, 2011 \(SEC File No. 001-13175\).](#)
- [3.09](#) — [Fifth Certificate of Amendment \(effective May 13, 2016\) to Restated Certificate of Incorporation of Valero Energy Corporation—incorporated by reference to Exhibit 3.02 to Valero’s Current Report on Form 8-K dated May 12, 2016, and filed May 18, 2016 \(SEC File No. 001-13175\).](#)
- [3.10](#) — [Amended and Restated Bylaws of Valero Energy Corporation—incorporated by reference to Exhibit 3.01 to Valero’s Current Report on Form 8-K dated September 20, 2017 and filed September 21, 2017 \(SEC File No. 001-13175\).](#)
- [4.01](#) — [Indenture dated as of December 12, 1997 between Valero Energy Corporation and The Bank of New York—incorporated by reference to Exhibit 3.4 to Valero’s Registration Statement on Form S-3 \(SEC File No. 333-56599\) filed June 11, 1998.](#)
- [4.02](#) — [First Supplemental Indenture dated as of June 28, 2000 between Valero Energy Corporation and The Bank of New York \(including Form of 7 3/4% Senior Deferrable Note due 2005\)—incorporated by reference to Exhibit 4.6 to Valero’s Current Report on Form 8-K dated June 28, 2000, and filed June 30, 2000 \(SEC File No. 001-13175\).](#)
- [4.03](#) — [Indenture \(Senior Indenture\) dated as of June 18, 2004 between Valero Energy Corporation and Bank of New York—incorporated by reference to Exhibit 4.7 to Valero’s Registration Statement on Form S-3 \(SEC File No. 333-116668\) filed June 21, 2004.](#)
- [4.04](#) — [Form of Indenture related to subordinated debt securities—incorporated by reference to Exhibit 4.8 to Valero’s Registration Statement on Form S-3 \(SEC File No. 333-116668\) filed June 21, 2004.](#)
- [4.05](#) — [Indenture dated as of March 10, 2015 between Valero Energy Corporation and U.S. Bank National Association, as trustee—incorporated by reference to Exhibit 4.1 to Valero’s Registration Statement on Form S-3 \(SEC File No. 333-202635\) filed March 10, 2015.](#)
- [4.06](#) — [Indenture, dated as of November 30, 2016, between Valero Energy Partners LP, as issuer, and U.S. Bank National Association, as trustee—incorporated by reference to Exhibit 4.1 to Valero Energy Partners LP’s Post-Effective Amendment No. 1 to Registration Statement on Form S-3 \(Registration File No. 333-208052\) filed November 30, 2016.](#)
- [4.07](#) — [First Supplemental Indenture \(with Parent Guarantee\), dated as of January 10, 2019, among Valero Energy Partners LP, as issuer; Valero Energy Corporation, as parent guarantor; and U.S. Bank National Association, as trustee—incorporated by reference to Exhibit 4.2 to Valero’s Current Report on Form 8-K dated and filed January 10, 2019 \(SEC File No. 001-13175\).](#)
- [4.08](#) — [Specimen Certificate of Common Stock—incorporated by reference to Exhibit 4.1 to Valero’s Registration Statement on Form S-3 \(SEC File No. 333-116668\) filed June 21, 2004.](#)
- [4.09](#) — [Description of Valero Energy Corporation common stock, \\$0.01 par value—incorporated by reference to Exhibit 4.09 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2019 \(SEC File No. 001-13175\).](#)
- [+10.01](#) — [Valero Energy Corporation Annual Bonus Plan, amended and restated as of February 28, 2018—incorporated by reference to Exhibit 10.01 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2017 \(SEC File No. 001-13175\).](#)
- [+10.02](#) — [Valero Energy Corporation 2011 Omnibus Stock Incentive Plan, amended and restated February 25, 2016—incorporated by reference to Exhibit 10.04 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2015 \(SEC File No. 001-13175\).](#)
- [+10.03](#) — [Valero Energy Corporation 2020 Omnibus Stock Incentive Plan—incorporated by reference to Appendix A to Valero’s Definitive Proxy Statement on Schedule 14A, filed March 19, 2020 \(SEC File No. 001-13175\).](#)
- [+10.04](#) — [Valero Energy Corporation Deferred Compensation Plan, amended and restated as of January 1, 2008—incorporated by reference to Exhibit 10.04 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2008 \(SEC File No. 001-13175\).](#)

- [+10.05](#) — [Valero Energy Corporation Amended and Restated Supplemental Executive Retirement Plan, amended and restated as of November 10, 2008—incorporated by reference to Exhibit 10.08 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2008 \(SEC File No. 001-13175\).](#)
- [+10.06](#) — [Valero Energy Corporation Excess Pension Plan, as amended and restated effective December 31, 2011—incorporated by reference to Exhibit 10.10 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2011 \(SEC File No. 001-13175\).](#)
- [+10.07](#) — [Form of Change of Control Severance Agreement \(Tier I\) between Valero Energy Corporation and executive officer—incorporated by reference to Exhibit 10.15 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2011 \(SEC File No. 001-13175\).](#)
- [+10.08](#) — [Form of Amendment \(dated January 7, 2013\) to Change of Control Severance Agreements \(to eliminate excise tax gross-up benefit\)—incorporated by reference to Exhibit 10.17 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2012 \(SEC File No. 001-13175\).](#)
- [+10.09](#) — [Form of Change of Control Severance Agreement \(Tier II-A\) between Valero Energy Corporation and executive officer—incorporated by reference to Exhibit 10.02 to Valero’s Current Report on Form 8-K dated November 2, 2016, and filed November 7, 2016 \(SEC File No. 001-13175\).](#)
- [*+10.10](#) — [Schedule of Tier II-A Change of Control Agreements.](#)
- [+10.11](#) — [Form of Amendment \(dated January 17, 2017\) to Change of Control Severance Agreements, amending Section 9 thereof—incorporated by reference to Exhibit 10.01 to Valero’s Current Report on Form 8-K dated and filed January 17, 2017 \(SEC File No. 001-13175\).](#)
- [+10.12](#) — [Form of Performance Share Agreement \(2019 and prior outstanding grants\)—incorporated by reference to Exhibit 10.13 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2019 \(SEC File No. 001-13175\).](#)
- [*+10.13](#) — [Form of Performance Share Agreement \(current\).](#)
- [+10.14](#) — [Form of Stock Option Agreement—incorporated by reference to Exhibit 10.21 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2011 \(SEC File No. 001-13175\).](#)
- [+10.15](#) — [Form of Performance Stock Option Agreement—incorporated by reference to Exhibit 10.21 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2012 \(SEC File No. 001-13175\).](#)
- [+10.16](#) — [Form of Restricted Stock Agreement \(2019 and prior outstanding grants\)—incorporated by reference to Exhibit 10.25 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2012 \(SEC File No. 001-13175\).](#)
- [*+10.17](#) — [Form of Restricted Stock Agreement \(current\).](#)
- [+10.18](#) — [Long-Term Incentive Agreement dated as of December 18, 2019, between Valero Energy Corporation and R. Lane Riggs—incorporated by reference to Exhibit 10.17 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2019 \(SEC File No. 001-13175\).](#)
- [+10.19](#) — [Letter Agreement, dated June 18, 2020, between Valero Energy Corporation and Donna M. Titzman—incorporated by reference to Exhibit 10.1 to Valero’s Current Report on Form 8-K dated June 18, 2020, and filed June 22, 2020 \(SEC File No. 001-13175\).](#)
- [+10.20](#) — [Form of Stock Unit Award Agreement for Non-Employee Directors \(standard\)-incorporated by reference to Exhibit 10.01 to Valero’s Current Report on Form 8-K dated April 30, 2019, and filed May 1, 2019 \(SEC File No. 001-13175\).](#)
- [+10.21](#) — [Form of Stock Unit Award Agreement for Non-Employee Directors \(with one-year hold provision\)-incorporated by reference to Exhibit 10.02 to Valero’s Current Report on Form 8-K dated April 30, 2019, and filed May 1, 2019 \(SEC File No. 001-13175\).](#)
- [10.22](#) — [Fourth Amended and Restated Revolving Credit Agreement, dated as of March 19, 2019, among Valero Energy Corporation, as Borrower; JPMorgan Chase Bank, N.A., as Administrative Agent; and the lenders named therein—incorporated by reference to Exhibit 10.1 to Valero’s Current Report on Form 8-K dated March 19, 2019, and filed March 19, 2019 \(SEC File No. 001-13175\).](#)

- [10.23](#) — [\\$875,000,000 364-Day Revolving Credit Agreement, dated as of April 13, 2020, among Valero Energy Corporation, as Borrower; JPMorgan Chase Bank, N.A., as Administrative Agent; and the lenders named therein—incorporated by reference to Exhibit 10.1 to Valero’s Current Report on Form 8-K dated and filed April 13, 2020 \(SEC File No. 001-13175\).](#)
- [14.01](#) — [Code of Ethics for Senior Financial Officers—incorporated by reference to Exhibit 14.01 to Valero’s Annual Report on Form 10-K for the year ended December 31, 2003 \(SEC File No. 001-13175\).](#)
- [14.02](#) — [Valero Energy Corporation Code of Business Conduct and Ethics—incorporated by reference to Exhibit 14.1 to Valero’s Current Report on Form 8-K dated January 26, 2021, and filed January 29, 2021 \(SEC File No. 001-13175\).](#)
- [*21.01](#) — [Valero Energy Corporation subsidiaries.](#)
- [*22.01](#) — [Subsidiary Issuer of Guaranteed Securities.](#)
- [*23.01](#) — [Consent of KPMG LLP dated February 23, 2021.](#)
- [*24.01](#) — [Power of Attorney dated February 23, 2021 \(on the signature page of this Form 10-K\).](#)
- [*31.01](#) — [Rule 13a-14\(a\) Certification \(under Section 302 of the Sarbanes-Oxley Act of 2002\) of principal executive officer.](#)
- [*31.02](#) — [Rule 13a-14\(a\) Certification \(under Section 302 of the Sarbanes-Oxley Act of 2002\) of principal financial officer.](#)
- [**32.01](#) — [Section 1350 Certifications \(under Section 906 of the Sarbanes-Oxley Act of 2002\).](#)
- [*99.01](#) — [Audit Committee Pre-Approval Policy.](#)
- ***101.INS — Inline XBRL Instance Document—the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
- ***101.SCH — Inline XBRL 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).

* Filed herewith.

** Furnished herewith.

*** Submitted electronically herewith.

+ Identifies management contracts or compensatory plans or arrangements required to be filed as an exhibit hereto.

++ Certain schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant agrees to furnish supplementally a copy of any such omitted schedule to the U.S. SEC upon request.

Pursuant to paragraph 601(b)(4)(iii)(A) of Regulation S-K, the registrant has omitted from the foregoing listing of exhibits, and hereby agrees to furnish to the U.S. SEC upon its request, copies of certain instruments, each relating to debt not exceeding 10 percent of the total assets of the registrant and its subsidiaries on a consolidated basis.

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Joseph W. Gorder, Jason W. Fraser, and Richard J. Walsh, or any of them, each with power to act without the other, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any or all subsequent amendments and supplements to this Annual Report on Form 10-K, and to file the same, or cause to be filed the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact and agent full power to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby qualifying and confirming all that said attorney-in-fact and agent or his substitute or substitutes may lawfully 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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Joseph W. Gorder</u> (Joseph W. Gorder)	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	February 23, 2021
<u>/s/ Jason W. Fraser</u> (Jason W. Fraser)	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	February 23, 2021
<u>/s/ H. Paulett Eberhart</u> (H. Paulett Eberhart)	Director	February 23, 2021
<u>/s/ Kimberly S. Greene</u> (Kimberly S. Greene)	Director	February 23, 2021
<u>/s/ Deborah P. Majoras</u> (Deborah P. Majoras)	Director	February 23, 2021
<u>/s/ Eric D. Mullins</u> (Eric D. Mullins)	Director	February 23, 2021
<u>/s/ Donald L. Nickles</u> (Donald L. Nickles)	Director	February 23, 2021
<u>/s/ Philip J. Pfeiffer</u> (Philip J. Pfeiffer)	Director	February 23, 2021
<u>/s/ Robert A. Profusek</u> (Robert A. Profusek)	Director	February 23, 2021
<u>/s/ Stephen M. Waters</u> (Stephen M. Waters)	Director	February 23, 2021
<u>/s/ Randall J. Weisenburger</u> (Randall J. Weisenburger)	Director	February 23, 2021
<u>/s/ Rayford Wilkins, Jr.</u> (Rayford Wilkins, Jr.)	Director	February 23, 2021

SCHEDULE OF TIER II-A CHANGE OF CONTROL AGREEMENTS

The following have executed Tier II-A Change of Control Agreements substantially in the form of the agreement filed as Exhibit 10.02 to Valero's Current Report on Form 8-K dated Nov. 2, 2016, and filed Nov. 7, 2016 (SEC File No. 1-13175).

Jason W. Fraser
R. Lane Riggs
Gary K. Simmons
Cheryl L. Thomas
Richard J. Walsh

PERFORMANCE SHARE AGREEMENT

This Performance Share Agreement (the “Agreement”), by and between Valero Energy Corporation, a Delaware corporation (“Valero”), and [____], a participant (the “Participant”) in Valero’s [2011][2020] Omnibus Stock Incentive Plan (as may be amended, the “Plan”), is entered into pursuant to and subject to the provisions of the Plan, to set forth the terms and conditions of the award of Performance Shares granted to Participant as of February 26, 2020.

1. **Grant of Performance Shares.** Valero grants to Participant [____] Performance Shares pursuant to Section 6.7 of the Plan. The Performance Shares represent rights to receive shares of Common Stock of Valero, subject to the terms and conditions of this Agreement and the Plan.
2. **Vesting and Delivery of Shares.**
 - A. **Vesting.** The Performance Shares granted hereunder shall vest over a period of three years in equal, one-third increments with the first increment vesting on the date of the regularly scheduled meeting of the Board’s Compensation Committee in January 2021, and the second and third increments vesting on the Committee’s meeting dates in January 2022 and January 2023, respectively (each of these vesting dates is referred to as a “Normal Vesting Date”); any shares of Common Stock to be issued in connection with such vesting are subject to the Compensation Committee’s verification of attainment of the Performance Objectives described in Section 4 below. If the Committee is unable to meet in January of a given year, then the Normal Vesting Date for that year will be a date not later than two-and-one-half months following the end of the year as selected by the Compensation Committee.
 - B. **Rights.** Until shares of Common Stock are actually issued to Participant (or his or her estate) in settlement of the Performance Shares, neither Participant nor any person claiming by, through or under Participant shall have any rights as a stockholder of Valero (including, without limitation, voting rights or any right to receive dividends or other distributions except as expressly provided in this Agreement) with respect to such shares.
 - C. **Distribution.** Any shares of Common Stock to be distributed under the terms of this Agreement shall be distributed as soon as administratively practicable after Performance Objectives described in Section 4 below have been verified by the Compensation Committee, but not later than two-and-one-half months following the end of the year in which such verification occurred.
3. **Performance Period.** Except as provided below with respect to a Change of Control (as defined in the Plan), the “Performance Period” for any Performance Shares eligible to vest on any Normal Vesting Date shall be as follows:
 - A. **First Segment.** The Performance Period for the first one-third vesting of Performance Shares (those vesting on the Normal Vesting Date in January 2021) shall be the calendar year ending on December 31, 2020.
 - B. **Second Segment.** The Performance Period for the second one-third vesting of Performance Shares (those vesting on the Normal Vesting Date in January 2022) shall be the two calendar years ending December 31, 2021.

C. **Third Segment.** The Performance Period for the final one-third vesting of Performance Shares (those vesting on the Normal Vesting Date in January 2023) shall be the three calendar years ending December 31, 2022.

4. **Performance Objectives.** On each Normal Vesting Date, Valero's performance will be measured against two metrics: (A) Valero's total shareholder return ("**TSR**") compared to its peers; and (B) Valero's Return on Invested Capital ("**ROIC**") versus a target. On the vesting date for each tranche of the Performance Shares, 75% of the target award will be assessed against the relative TSR performance measure, and 25% will be assessed against the ROIC performance measure. The total number of shares of Common Stock that may be issued for each vesting tranche will be determined by combining the number of earned shares from each metric as determined through each metric's unique performance criteria set forth below.

A. **Total Shareholder Return (TSR) – 75% weighting.**

(i) TSR will be compiled for a peer group of companies approved by the Compensation Committee (the "**Target Group**") for the Performance Period immediately preceding each Normal Vesting Date. TSR for each such company is measured by dividing (A) the sum of (i) the dividends on the common stock of such company during the Performance Period, assuming dividend reinvestment, and (ii) the difference between the average closing price of a share of such company's common stock for the 15 trading days ending December 31 at the end of the Performance Period and the average closing price of such shares for the 15 trading days ending December 31 immediately prior to the beginning of the Performance Period (appropriately adjusted for any stock dividend, stock split, spin-off, merger or other similar corporate events), by (B) the average closing price of a share of such company's common stock for the 15 trading days ending December 31 immediately prior to the beginning of the Performance Period.

- (ii) For each Performance Period, the TSR for Valero and each company in the Target Group shall be arranged by rank from highest performer to lowest performer according to the TSR achieved by each company. Shares of Common Stock will be awarded to Participant in accordance with Valero’s percentile ranking within the Target Group. The number of shares of Common Stock, if any, that Participant will be entitled to receive in settlement of the vested Performance Shares will be determined on each Normal Vesting Date. Subject to the provisions of the Plan and this Agreement, on such Normal Vesting Date, 75% of the vesting Performance Shares will be awarded as shares of Common Stock to the Participant per the payout percentages listed below when Valero’s TSR during the Performance Period falls within the following percentiles (“Percentiles”):

Ranking	Percentile	Payout
1	100.0%	200.0%
2	90.0%	200.0%
3	80.0%	175.0%
4	70.0%	150.0%
5	60.0%	125.0%
6	50.0%	100.0%
7	40.0%	75.0%
8	30.0%	50.0%
9	20.0%	25.0%
10	10.0%	0.0%
11	0.0%	0.0%

- B. Return on Invested Capital (ROIC) – 25% weighting.** For the ROIC metric, Valero’s trailing three-year average ROIC will be determined at the end of each Performance Period. The number of shares of Common Stock, if any, that Participant will be entitled to receive in settlement of the vested Performance Shares will be determined on each Normal Vesting Date. Subject to the provisions of the Plan and this Agreement, on such Normal Vesting Date, 25% of the vesting Performance Shares will be awarded as shares of Common Stock to the Participant per the payout percentages listed below based on Valero’s achievement of a three-year average ROIC per the following (straight-line interpolation will be used to determine shares for ROIC performance between the defined payout levels). The Target will be approved annually by the Committee.

	3-yr Avg. ROIC	Payout
<i>Maximum</i>	10.750%	200.0%
	10.125%	150.0%
<i>Target</i>	9.500%	100.0%
	8.500%	50.0%
	7.500%	0.0%

C. **Example of Vesting and Payout.** Assume that 12,000 Performance Shares are vesting on a Normal Vesting Date. Assume the following for Valero's performance:

- TSR achievement at 70th percentile (150% payout)
- ROIC performance of 9.500% (100% payout)

Calculation of shares of Common Stock to be awarded for Valero performance:

- TSR: $12,000 \times 75\% = 9,000$ perf. shares $\times 150\%$ payout = 13,500 common shares
- ROIC: $12,000 \times 25\% = 3,000$ perf. shares $\times 100\%$ payout = 3,000 common shares
- Total shares of Common Stock = 16,500 shares (13,500 + 3,000)

D. **Unearned Shares.** Any Performance Shares not awarded as shares of Common Stock on a Normal Vesting Date will expire and be forfeited; such Performance Shares may not be carried forward for any additional Performance Period.

5. **Dividend Equivalent Award.** In addition to the Performance Shares granted in Section 1, the Participant is granted a Dividend Equivalent Award payable in shares of Common Stock, as provided herein. On each Normal Vesting Date, the amount of dividends paid to holders of Common Stock during the applicable Performance Period shall be determined with respect to the Participant's Performance Shares that are vesting on that Normal Vesting Date — calculated as if the Performance Shares were outstanding shares of Common Stock (the resulting value being hereafter referred to as the "Target Dividend Equivalent Value" or "TDEV"). The TDEV is equal to (a) the number of Performance Shares vesting, times (b) the amount of accumulated dividends per share during the Performance Period.

The number of shares of Common Stock payable to Participant with respect to the Dividend Equivalent Award is equal to the sum of (1) plus (2), divided by (3), where:

(1) is equal to:

(a) TDEV, times (b) 75% (TSR weighting), times (c) the TSR payout percentage for the Performance Period;

(2) is equal to:

(a) TDEV, times (b) 25% (ROIC weighting), times (c) the ROIC payout percentage for the Performance Period; and

(3) is equal to the Fair Market Value per share of Common Stock on the vesting date.

Such shares of Common Stock shall be distributed to Participant contemporaneously with the distribution of the shares of Common Stock issued pursuant to Section 4. See Exhibit A for an example of this calculation.

6. **Termination of Employment.**

A. **Voluntary Termination, Termination for "Cause," and Early Retirement.** If Participant's employment is

- voluntarily terminated by the Participant (other than through retirement at age 60+, death or disability), including termination in connection with Participant's voluntary early retirement (i.e., prior to age 60),
- terminated by Valero for "cause" (as defined pursuant to the Plan),

then those Performance Shares that are outstanding and have not vested as of the effective date of termination shall thereupon be forfeited.

B. Retirement. If a Participant's employment is terminated through his or her retirement when the Participant is age 60 or older, then any Performance Shares that (i) have not theretofore vested or been forfeited, and (ii) were granted at least one year prior to the Participant's effective date of retirement, shall continue to remain outstanding and shall vest on the Normal Vesting Dates according to their original vesting schedule.

But any outstanding Performance Shares that were granted within one year of such Participant's effective date of retirement shall be prorated based on the number of months worked from the date of grant to the Participant's retirement date (rounding upward), and the prorated number of Performance Shares shall thereafter vest on the Normal Vesting Dates according to their original vesting schedule, and shall be distributed at the time(s) provided for under Section 2.C. above. *Example:*

- 8,030 Performance Shares granted on February 26, 2020,
- Participant retires at age 60+ effective July 31, 2020,
- working period is calculated as 6 months (5 full months plus partial month rounding upward to 6 months),
- original grant is adjusted by 6/12ths (50%) resulting in 4,015 Performance Shares to vest according to their original vesting schedule.

C. Death, Disability, Involuntary Termination Other Than for "Cause," and Change of Control. If a Participant's employment is terminated (i) through death or disability, or (ii) by Valero other than for cause (as determined pursuant to the Plan), or (iii) as a result of a Change of Control (as described in the Plan) (each of the foregoing is hereafter referred to as a "Trigger Date"), then each Performance Period with respect to any Performance Shares that have not vested or been forfeited shall be terminated effective as of such Trigger Date. The (i) TSR for Valero and for each company in the Target Group and (ii) Valero's ROIC percentage, shall be determined for each such shortened Performance Period and the percentage of Performance Shares to be awarded as shares of Common Stock for each such shortened Performance Period shall be determined in accordance with Section 4 and Section 5 and shall be distributed as soon as administratively practicable thereafter, and in any event within 90 days following such termination of employment.

- For purposes of determining the number of Performance Shares to be received as of any Trigger Date, the Target Group as most recently determined by the Compensation Committee prior to the Trigger Date shall be used.
- If the Trigger Date is the result of a Change of Control, then the number of shares of Common Stock to be awarded to the Participant shall be prorated commensurate with the length of service of the Participant during each Performance Period. See Exhibit B for an example of this calculation.

7. Cash Payment Election. Effective on any Normal Vesting Date (or Trigger Date under Section 6.C.), the Participant (or the Participant's estate under Section 6.C) may elect to receive up to 50% of the after-tax value of the aggregate number of shares of Common Stock earned on such Normal Vesting Date (or Trigger Date) in cash, with the remainder paid in shares of Common Stock. *Example:*

- following the calculation of Valero's performance against the TSR and ROIC metrics for the two-year performance period ending December 31, 2021, it is determined that the Participant is entitled to receive 8,000 shares of Common Stock on the Normal Vesting Date occurring in January 2022 (the "2022 Normal Vesting Date"),

- assume that the 8,000 shares have an aggregate tax value of \$600,000 (8,000 shares times an assumed \$75 FMV per share on the 2022 Normal Vesting Date), and the Participant has made a tax withholding election of 39.6%,
- the after-tax value of the 8,000 shares of Common Stock awarded on the 2022 Normal Vesting Date is \$362,400 (\$600,000 times 60.4%),
- the Participant may elect to receive up to \$181,200 (\$362,400 times 50%) in cash on the 2022 Normal Vesting Date.

8. **Plan Incorporated by Reference.** The Plan is incorporated into this Agreement by this reference and is made a part hereof for all purposes. Capitalized terms not otherwise defined in this Agreement shall have the meaning specified in the Plan.
9. **No Assignment.** This Agreement and the Participant's interest in the Performance Shares granted by this Agreement are of a personal nature, and, except as expressly permitted under the Plan, Participant's rights with respect thereto may not be sold, mortgaged, pledged, assigned, transferred, conveyed or disposed of in any manner by Participant, except by an executor or beneficiary pursuant to a will or pursuant to the laws of descent and distribution. Any such attempted sale, mortgage, pledge, assignment, transfer, conveyance or disposition is void, and Valero will not be bound thereby.
10. **Successors.** This Agreement shall be binding upon any successors of Valero and upon the beneficiaries, legatees, heirs, administrators, executors, legal representatives, successors and permitted assigns of Participant.
11. **Code Section 409A.** This Agreement is intended to comply, and shall be administered consistently in all respects, with Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), and the regulations and additional guidance promulgated thereunder to the extent applicable. Accordingly, Valero shall have the authority to take any action, or refrain from taking any action, with respect to this Agreement that is reasonably necessary to ensure compliance with Code Section 409A (provided that Valero shall choose the action that best preserves the value of payments and benefits provided to Participant under this Agreement that is consistent with Code Section 409A), and the parties agree that this Agreement shall be interpreted in a manner that is consistent with Code Section 409A. In furtherance, but not in limitation of the foregoing:
- (a) in no event may Participant designate, directly or indirectly, the calendar year of any payment to be made hereunder;
 - (b) to the extent the Participant is a "specified employee" within the meaning of Code Section 409A, payments, if any, that constitute a "deferral of compensation" under Code Section 409A and that would otherwise become due during the first six months following Participant's termination of employment shall be delayed and all such delayed payments shall be paid in full in the seventh month after such termination date, provided that the above delay shall not apply to any payment that is excepted from coverage by Code Section 409A, such as a payment covered by the short-term deferral exception described in Treasury Regulations Section 1.409A-1(b)(4);
 - (c) notwithstanding any other provision of this Agreement, a termination, resignation or retirement of Participant's employment hereunder shall mean and be interpreted consistent with a "separation from service" within the meaning of Code Section 409A;

- (d) terms defined in this section will have the meanings given such terms under Section 409A if and to the extent required to comply with Section 409A. Notwithstanding any other provision hereof, Valero makes no representations or warranties and will have no liability to Participant or any other person if any provision of or payment under this Agreement is determined to constitute deferred compensation subject to Section 409A but does not satisfy the conditions of Section 409A.

Executed effective as of the date first written above.

VALERO ENERGY CORPORATION

/s/ Julia R. Reinhart

Julia Rendon Reinhart

Senior Vice President & Chief Human Resources Officer

Participant

Exhibit A

Example of Potential Payout of Dividend Equivalent Award in Shares of Common Stock (per Section 5 of the Agreement)

Assumptions and Calculations (for illustration purposes only):

1. Assume the Participant was granted 36,000 Performance Shares on February 26, 2020.
2. Assume the Normal Vesting Date for the second segment of these Performance Shares is January 22, 2022. On that date 12,000 Performance Shares ($36,000 / 3 = 12,000$) vest with respect to the two-year Performance Period ending December 31, 2021.
3. Assume the cumulative amount of dividends paid to holders of Common Stock during the eight quarters of the Performance Period is \$7.52 per share.
4. The “Target Dividend Equivalent Value” (“TDEV”) is \$90,240 (12,000 Performance Shares vesting, multiplied by \$7.52 accumulated dividends per share).
5. Valero’s TSR ranking for the Performance Period is determined (per Section 4.A) to generate a payout of 150%.
6. Valero’s ROIC performance for the Performance Period is determined (per Section 4.B.) to generate a payout of 100%.
7. The Fair Market Value per share of Common Stock on the vesting date is \$75.00.
8. Based on the foregoing, the total number of shares of Common Stock earned by the Participant for the Dividend Equivalent Award is 1,655 shares (rounded up from 1,654.4). The calculation is illustrated below as the sum of (1) plus (2), divided by (3), where:
 - (1) is \$101,520, calculated as \$90,240 (TDEV), times 75% (TSR weighting), times 150% (TSR payout percentage);
 - (2) is \$22,560, calculated as \$90,240 (TDEV), times 25% (ROIC weighting), times 100% (ROIC payout percentage); and
 - (3) is \$75.00, the Fair Market Value per share of Common Stock on the vesting date.

Exhibit B

Example of Potential Payout in a Change of Control Context (per Section 6.C.(ii) of the Agreement)

Assumptions and Calculations (for illustration purposes only):

1. Assume the Participant was granted 36,000 Performance Shares on February 26, 2020.
2. Assume Participant's employment is terminated on June 30, 2020 as a result of a Change of Control.
3. Per Section 6.C. of the Agreement, all Performance Periods for all segments (First Segment, Second Segment, Third Segment (See Section 3)) are shortened to end on June 30, 2020.
4. Valero's TSR ranking for each shortened Performance Period is determined to generate a payout of 150%.
5. Valero's ROIC performance for each shortened Performance Period is determined to generate a payout of 100%.
6. Payout of common shares to the Participant is prorated based on the Participant's length of service during the original Performance Periods.

First Segment calculation.

$36,000 / 3 = 12,000$ performance shares.

Calculation of shares of Common Stock to be awarded for Valero performance:

- TSR: $12,000 \times 75\% \times 150\%$ payout = 13,500 common shares
- ROIC: $12,000 \times 25\% \times 100\%$ payout = 3,000 common shares
- Total shares of Common Stock = 16,500 shares (13,500 + 3,000)

Prorate for 6 months of service in the 12-month Performance Period.

$16,500$ common shares $\times 6/12 =$ 8,250 common shares

Second Segment calculation.

$36,000 / 3 = 12,000$ performance shares.

Calculation of shares of Common Stock to be awarded for Valero performance:

- TSR: $12,000 \times 75\% \times 150\%$ payout = 13,500 common shares
- ROIC: $12,000 \times 25\% \times 100\%$ payout = 3,000 common shares
- Total shares of Common Stock = 16,500 shares (13,500 + 3,000)

Prorate for 6 months of service in the 24-month Performance Period.

$16,500$ common shares $\times 6/24 =$ 4,125 common shares

Third Segment calculation.

$36,000 / 3 = 12,000$ performance shares.

Calculation of shares of Common Stock to be awarded for Valero performance:

- TSR: $12,000 \times 75\% \times 150\%$ payout = 13,500 common shares
- ROIC: $12,000 \times 25\% \times 100\%$ payout = 3,000 common shares
- Total shares of Common Stock = 16,500 shares (13,500 + 3,000)

Prorate for 6 months of service in the 36-month Performance Period.

$16,500$ common shares $\times 6/36 =$ 2,750 common shares

Total 15,125 common shares

RESTRICTED STOCK AGREEMENT
Valero Energy Corporation 2020 Omnibus Stock Incentive Plan

This Restricted Stock Agreement (this “Agreement”) is between Valero Energy Corporation, a Delaware corporation (“Valero”), and [_____], an employee of Valero or one of its Affiliates (“Employee”), who agree as follows:

1. Introduction. Pursuant to the **Valero Energy Corporation 2020 Omnibus Stock Incentive Plan** (as may be amended, the “Plan”), on [Grant Date], Employee was awarded [Number of Shares] shares of Common Stock of Valero, under the Plan as Restricted Stock (as defined in the Plan) (“Restricted Stock”). The parties hereby enter into this Agreement to evidence the terms, conditions and restrictions applicable to the Restricted Stock.

2. The Plan, Restrictions, Vesting. The Plan is incorporated herein by reference for all purposes, and Employee hereby agrees to the terms and conditions stated therein applicable to the Restricted Stock and the rights and powers of Valero and the Committee as provided therein. In addition, Employee agrees as follows:

2.01 Except to the extent otherwise provided in the Plan or this Agreement, shares of Restricted Stock issued to Employee under the Plan may not be sold, exchanged, pledged, hypothecated, transferred, garnished or otherwise disposed of or alienated prior to vesting.

2.02 Except to the extent otherwise provided in the Plan, Employee’s rights to and interest in the shares of Restricted Stock described herein shall vest and accrue to Employee in the following increments: [___] shares on [1st year anniversary of grant]; [___] shares on [2nd year anniversary of grant]; and [___] shares on [3rd year anniversary of grant].

2.03 Employee agrees that in lieu of certificates representing Employee’s shares of Restricted Stock, the Restricted Stock and any Shares issuable in connection with their vesting may be issued in uncertificated form pursuant to the Direct Registration System (“DRS”) of Valero’s stock transfer agent.

2.04 If, as the result of a stock split, stock dividend, combination of shares or any other change, including an exchange of securities for any reason, the Employee shall be entitled to new or additional or different shares of stock or securities, such stock or securities shall be subject to the terms and conditions of the Plan and this Agreement.

3. Limitation. The Employee shall have no rights with respect to any shares of Restricted Stock not expressly conferred by the Plan or this Agreement.

4. Tax Payment Election. The Employee may make the payment of the amount of any taxes required to be collected or withheld by Valero in connection with the vesting of shares of Restricted Stock in whole or in part by electing to have Valero withhold from the number of Shares otherwise deliverable a number of Shares whose Fair Market Value equals the amount of the applicable federal, state, local or employment tax requirement.

5. Miscellaneous. All capitalized terms contained in this Agreement shall have the definitions set forth in the Plan unless otherwise defined herein. This Agreement shall be binding upon the parties hereto and their respective beneficiaries, heirs, administrators, executors, legal representatives and successors.

6. Code Section 409A. The issuance of shares under this Award shall be made on or as soon as reasonably practical following the applicable date of vesting, but in any event no later than the 15th day of the third month following the end of the year in which the applicable date of vesting occurs. With respect to the receipt of dividends, the payment of dividends shall be made by the last day of the fiscal quarter during which dividends on Valero Common Stock are paid, but in any event by no later than the later of: (a) the end of the year in which the dividends on Valero Common Stock are paid, or (b) the 15th day of the third calendar month following date that the dividends on Valero Common Stock are paid. This Agreement and the award evidenced hereby are intended to comply, and shall be administered consistently, in all respects with Section 409A of the Internal Revenue Code and the regulations promulgated thereunder to the extent applicable to the Employee. If necessary in order to ensure such compliance, this Agreement may be reformed consistent with guidance issued by the Internal Revenue Service.

EFFECTIVE as of the [] day of [], 20[].

VALERO ENERGY CORPORATION

/s/ Julia R. Reinhart

Julia Rendon Reinhart

Senior Vice President & Chief Human Resources Officer

Employee

**Subsidiaries of Valero Energy Corporation
as of February 4, 2021**

<u>Name of Entity</u>	<u>State of Incorporation/Organization</u>
AIR BP-PBF DEL PERU SAC	Peru
BELFAST STORAGE LTD	Northern Ireland
CANADIAN ULTRAMAR COMPANY	Nova Scotia
COLONNADE INSURANCE COMPANY	Texas
DIAMOND ALTERNATIVE ENERGY, LLC	Delaware
DIAMOND ALTERNATIVE ENERGY OF CANADA INC.	Canada
DIAMOND GREEN DIESEL HOLDINGS LLC	Delaware
DIAMOND GREEN DIESEL LLC	Delaware
DIAMOND K RANCH LLC	Texas
DIAMOND OMEGA COMPANY, L.L.C.	Delaware
DIAMOND SHAMROCK REFINING COMPANY, L.P.	Delaware
DIAMOND UNIT INVESTMENTS, L.L.C.	Delaware
DSRM NATIONAL BANK	U.S.A.
ENTERPRISE CLAIMS MANAGEMENT, INC.	Texas
GCP LOGISTICS COMPANY LLC	Delaware
GOLDEN EAGLE ASSURANCE LIMITED	British Columbia
HAMMOND MAINLINE PIPELINE LLC	Delaware
HUNTWAY REFINING COMPANY	Delaware
MAINLINE PIPELINES LIMITED	England and Wales
MAPLE ETHANOL LTD.	Virgin Islands (U.K.)
MICHIGAN REDEVELOPMENT GP, LLC	Delaware
MICHIGAN REDEVELOPMENT, L.P.	Delaware
MRP PROPERTIES COMPANY, LLC	Michigan
NECHES RIVER HOLDING CORP.	Delaware
OCEANIC TANKERS AGENCY LIMITED	Quebec
PARKWAY PIPELINE LLC	Delaware
PENTA TANKS TERMINALS S.A.	Peru
PICKARD PLACE CONDOMINIUM ASSOCIATION	Michigan
PI DOCK FACILITIES LLC	Delaware
PORT ARTHUR COKER COMPANY L.P.	Delaware
PREMCOR USA INC.	Delaware
PROPERTY RESTORATION, L.P.	Delaware
PURE BIOFUELS HOLDINGS L.P.	Alberta
SABINE RIVER HOLDING CORP.	Delaware
SABINE RIVER LLC	Delaware
SAINT BERNARD PROPERTIES COMPANY LLC	Delaware

SUNBELT REFINING COMPANY, L.P.	Delaware
THE PREMCOR PIPELINE CO.	Delaware
THE PREMCOR REFINING GROUP INC.	Delaware
THE SHAMROCK PIPE LINE CORPORATION	Delaware
TRANSPORT MARITIME ST. LAURENT INC.	Quebec
ULTRAMAR ACCEPTANCE INC.	Canada
ULTRAMAR ENERGY INC.	Delaware
ULTRAMAR INC.	Nevada
V-TEX LOGISTICS LLC	Delaware
VALERO ADMINISTRATIVE SERVICES DE MÉXICO, S.A. DE C.V.	Mexico
VALERO ARUBA ACQUISITION COMPANY I, LTD.	Virgin Islands (U.K.)
VALERO ARUBA FINANCE INTERNATIONAL, LTD.	Virgin Islands (U.K.)
VALERO ARUBA HOLDING COMPANY N.V.	Aruba
VALERO ARUBA HOLDINGS INTERNATIONAL, LTD.	Virgin Islands (U.K.)
VALERO ARUBA MAINTENANCE/OPERATIONS COMPANY N.V.	Aruba
VALERO (BARBADOS) HOLDINGS LLC	Delaware
VALERO (BARBADOS) SRL	Barbados
VALERO BROWNSVILLE TERMINAL LLC	Texas
VALERO CANADA FINANCE, INC.	Delaware
VALERO CANADA L.P.	Newfoundland
VALERO CAPITAL CORPORATION	Delaware
VALERO COKER CORPORATION ARUBA N.V.	Aruba
VALERO CUSTOMS & TRADE SERVICES, INC.	Delaware
VALERO ENERGY ARUBA II COMPANY	Cayman Islands
VALERO ENERGY FOUNDATION	Texas
VALERO ENERGY FOUNDATION OF CANADA	Canada
VALERO ENERGY INC.	Canada
VALERO ENERGY (IRELAND) LIMITED	Ireland
VALERO ENERGY LTD	England and Wales
VALERO ENERGY PARTNERS GP LLC	Delaware
VALERO ENERGY PARTNERS LP	Delaware
VALERO ENERGY UK LTD	England and Wales
VALERO ENTERPRISES, INC.	Delaware
VALERO EQUITY SERVICES LTD	England and Wales
VALERO FINANCE L.P. I	Newfoundland
VALERO FINANCE L.P. II	Newfoundland
VALERO FINANCE L.P. III	Newfoundland
VALERO FOREST CONTRIBUTION LLC	Delaware
VALERO GRAIN MARKETING, LLC	Texas
VALERO HOLDCO UK LTD	United Kingdom
VALERO HOLDINGS, INC.	Delaware
VALERO INTERNATIONAL HOLDINGS, INC.	Nevada
VALERO LATIN AMERICA SERVICES LLC	Delaware
VALERO LIVE OAK LLC	Texas
VALERO LOGISTICS IRELAND LIMITED	Ireland

VALERO LOGISTICS UK LTD	England and Wales
VALERO MARKETING AND SUPPLY COMPANY	Delaware
VALERO MARKETING AND SUPPLY DE MÉXICO S.A. DE C.V.	Mexico
VALERO MARKETING AND SUPPLY INTERNATIONAL LTD.	Cayman Islands
VALERO MARKETING AND SUPPLY (PANAMA) LLC	Delaware
VALERO MARKETING IRELAND LIMITED	Ireland
VALERO MKS LOGISTICS, L.L.C.	Delaware
VALERO NEDERLAND COÖPERATIEF U.A.	The Netherlands
VALERO NEW AMSTERDAM B.V.	The Netherlands
VALERO OPERATIONAL SERVICES DE MÉXICO, S.A. DE C.V.	Mexico
VALERO OPERATIONS SUPPORT, LTD	England and Wales
VALERO PARTNERS CCTS, LLC	Delaware
VALERO PARTNERS CORPUS EAST, LLC	Delaware
VALERO PARTNERS CORPUS WEST, LLC	Delaware
VALERO PARTNERS EP, LLC	Delaware
VALERO PARTNERS HOUSTON, LLC	Delaware
VALERO PARTNERS LOUISIANA, LLC	Delaware
VALERO PARTNERS LUCAS, LLC	Delaware
VALERO PARTNERS MCKEE, LLC	Delaware
VALERO PARTNERS MEMPHIS, LLC	Delaware
VALERO PARTNERS MERAUX, LLC	Delaware
VALERO PARTNERS NORTH TEXAS, LLC	Delaware
VALERO PARTNERS OPERATING CO. LLC	Delaware
VALERO PARTNERS PAPS, LLC	Delaware
VALERO PARTNERS PORT ARTHUR, LLC	Delaware
VALERO PARTNERS SOUTH TEXAS, LLC	Delaware
VALERO PARTNERS TEXAS CITY, LLC	Delaware
VALERO PARTNERS THREE RIVERS, LLC	Delaware
VALERO PARTNERS WEST MEMPHIS, LLC	Delaware
VALERO PARTNERS WEST TEXAS, LLC	Delaware
VALERO PARTNERS WYNNEWOOD, LLC	Delaware
VALERO PAYMENT SERVICES COMPANY	Virginia
VALERO PEMBROKESHIRE LLC	Delaware
VALERO PEMBROKESHIRE OIL TERMINAL LTD	England and Wales
VALERO (PERU) HOLDINGS GP LLC	Delaware
VALERO (PERU) HOLDINGS LIMITED	British Columbia
VALERO PERU S.A.C.	Peru
VALERO PLAINS COMPANY LLC	Texas
VALERO POWER MARKETING LLC	Delaware
VALERO RAIL OPERATIONS DE MÉXICO, S.A. DE C.V.	Mexico
VALERO REFINING AND MARKETING COMPANY	Delaware
VALERO REFINING COMPANY-ARUBA N.V.	Aruba
VALERO REFINING COMPANY-CALIFORNIA	Delaware

VALERO REFINING COMPANY-OKLAHOMA	Michigan
VALERO REFINING COMPANY-TENNESSEE, L.L.C.	Delaware
VALERO REFINING-MERAUX LLC	Delaware
VALERO REFINING-NEW ORLEANS, L.L.C.	Delaware
VALERO REFINING-TEXAS, L.P.	Texas
VALERO RENEWABLE FUELS COMPANY, LLC	Texas
VALERO SECURITY SYSTEMS, INC.	Delaware
VALERO SERVICES, INC.	Delaware
VALERO SKELLYTOWN PIPELINE, LLC	Delaware
VALERO TEJAS COMPANY LLC	Delaware
VALERO TERMINAL HOLDCO LTD	England and Wales
VALERO TERMINALING AND DISTRIBUTION COMPANY	Delaware
VALERO TERMINALING AND DISTRIBUTION DE MEXICO, S.A. DE C.V.	Mexico
VALERO TEXAS POWER MARKETING, INC.	Delaware
VALERO ULTRAMAR HOLDINGS INC.	Delaware
VALERO UNIT INVESTMENTS, L.L.C.	Delaware
VALERO WEST WALES LLC	Delaware
VRG PROPERTIES COMPANY	Delaware
VTD PROPERTIES COMPANY	Delaware
WARSHALL COMPANY LLC	Delaware
ZELIG COMMERCIAL, INC.	Panama

Subsidiary Issuer of Guaranteed Securities

As of December 31, 2020, Valero Valero Energy Corporation (Parent Guarantor) was the sole guarantor of the following unsecured notes issued by Valero Energy Partners LP (Subsidiary Issuer), a Delaware limited partnership and an indirect wholly owned subsidiary of Parent Guarantor:

- \$500 million of 4.375 percent Senior Notes due December 15, 2026; and
- \$500 million of 4.5 percent Senior Notes due March 15, 2028.

Consent of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders
Valero Energy Corporation:

We consent to the incorporation by reference in the registration statements, as amended, on Form S-3ASR (Registration No. 333-224993) and Form S-8 (Registration Nos. 333-106620, 333-129032, 333-136333, 333-174721, 333-205756, and 333-238071) of Valero Energy Corporation and subsidiaries of our reports dated February 23, 2021, with respect to the consolidated balance sheets of Valero Energy Corporation and subsidiaries as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, equity, and cash flows for each of the years in the three-year period ended December 31, 2020, and the related notes (collectively, the consolidated financial statements), and the effectiveness of internal control over financial reporting as of December 31, 2020, which reports appear in the December 31, 2020 annual report on Form 10-K of Valero Energy Corporation and subsidiaries.

/s/ KPMG LLP

San Antonio, Texas
February 23, 2021

**CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Joseph W. Gorder, certify that:

1. I have reviewed this annual report on Form 10-K of Valero Energy Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 23, 2021

/s/ Joseph W. Gorder

Joseph W. Gorder
Chief Executive Officer

**CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Jason W. Fraser, certify that:

1. I have reviewed this annual report on Form 10-K of Valero Energy Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 23, 2021

/s/ Jason W. Fraser

Jason W. Fraser
Executive Vice President and Chief Financial Officer

**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 Valero Energy Corporation (the Company) on Form 10-K for the year ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the Report), the undersigned hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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 the Company.

/s/ Joseph W. Gorder

Joseph W. Gorder
Chief Executive Officer
February 23, 2021

A signed original of the written statement required by Section 906 has been provided to Valero Energy Corporation and will be retained by Valero Energy Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

**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 Valero Energy Corporation (the Company) on Form 10-K for the year ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the Report), the undersigned hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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 the Company.

/s/ Jason W. Fraser

Jason W. Fraser
Executive Vice President and Chief Financial Officer
February 23, 2021

A signed original of the written statement required by Section 906 has been provided to Valero Energy Corporation and will be retained by Valero Energy Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

VALERO ENERGY CORPORATION

Audit Committee Pre-Approval Policy

I. Statement of Principles

Pursuant to Section 10A of the Securities Exchange Act of 1934, as amended by Section 202 of the Sarbanes-Oxley Act of 2002 (“SOX Act”), the Audit Committee of the board of directors (the “Audit Committee”) of Valero Energy Corporation (the “Company”) is required to pre-approve the audit and non-audit services performed by the Company’s independent auditor to assure that the provision of such services does not impair the auditor’s independence. The SEC’s rules establish two approaches for pre-approving services. The two approaches are not mutually exclusive:

- the Audit Committee may pre-approve each particular service on a case-by-case basis (“*separate pre-approval*”), and
- the Audit Committee may adopt a pre-approval policy that is detailed as to the particular types of services that may be provided by the independent auditor without consideration by the Audit Committee on a case-by-case basis (“*policy-based pre-approval*”).

The Audit Committee believes that a combination of these approaches will provide an effective and efficient procedure to pre-approve services performed by the independent auditor. Therefore, unless a type of service has received policy-based pre-approval (as specifically identified in the appendices to this policy), it will require separate pre-approval by the Audit Committee.

The appendices to this policy contain lists of services that have received policy-based pre-approval of this Audit Committee in the following categories (categorized in accordance with the SEC’s rules):

- Audit Services
- Audit-Related Services
- Tax Services
- All Other Services

II. Term of Pre-Approvals

The term of the policy-based pre-approvals stated in the appendices to this policy is the period from January 1, 2021 to January 31, 2024, unless the Audit Committee specifically provides for a different period. The Audit Committee will review and pre-approve the services that may be provided by the independent auditor. The Audit Committee will revise the list of policy-based pre-approved services from time to time as the Committee deems necessary or appropriate.

III. Delegation

In accordance with the SOX Act and SEC rules, the Audit Committee hereby delegates to its Chairman the authority to grant separate pre-approvals of services and fees in accordance with this policy. The Audit Committee may further delegate pre-approval authority from time to time to one or more of its other members in its discretion. Any committee member to whom pre-approval authority is delegated shall report any pre-approval decisions to the full Audit Committee at its next meeting. The Audit Committee does not delegate its responsibilities to pre-approve services to any member of the Company's management.

IV. Services for which *Separate Pre-Approval* is Required

The terms and fees for the following services of the independent auditor require *separate* pre-approval by the Audit Committee:

- the annual financial statement audit, including all audits, reviews, procedures and other services required to be performed by the independent auditor to form an opinion on the Company's consolidated financial statements, and
- the annual audit of the Company's internal control over financial reporting, including all services required to be performed by the independent auditor to issue its report on the effectiveness of the Company's internal control over financial reporting.

The Audit Committee will monitor these engagements as it deems appropriate, and will approve, if necessary, any changes in terms, conditions and fees resulting from changes in engagement scope, changes in the Company's structure or other matters.

V. Services for which *Policy-Based Pre-Approval* is Available

A. Audit Services

The Audit Committee may grant *policy-based* pre-approval for Audit Services other than the services described in Section IV above. These Audit Services are generally services that only the Company's independent auditor reasonably can provide, and include:

- services associated with SEC registration statements (*e.g.*, comfort letters, consents), periodic reports and other documents filed with the SEC or other documents issued in connection with securities offerings,
- statutory audits or financial audits for subsidiaries or affiliates of the Company.

The Audit Committee has given policy-based pre-approval for the Audit Services listed in Appendix A. All other Audit Services must be separately pre-approved by the Audit Committee.

B. Audit-Related Services

Audit-Related Services are assurance and related services that are reasonably related to the performance of the annual audit or quarterly review of the Company's financial statements or that are traditionally performed by the independent auditor. The Audit Committee may grant policy-based pre-approval for Audit-Related Services. These services would include:

- employee benefit plan audits, and
- due diligence services related to proposed mergers and acquisitions.

The Audit Committee believes that the provision of the Audit-Related Services listed in Appendix B does not impair the independence of the auditor, and has given policy-based pre-approval for the Audit-Related Services listed in Appendix B. All other Audit-Related Services must be separately pre-approved by the Audit Committee.

C. Tax Services

The Audit Committee believes that the independent auditor can provide Tax Services to the Company such as tax compliance, tax planning and tax advice without impairing the auditor's independence. However, the Audit Committee will not permit the retention of the independent auditor in connection with a transaction initially recommended by the independent auditor, the purpose of which may be tax avoidance and the tax treatment of which may not be supported in the U.S. Internal Revenue Code and related regulations or in the tax laws and regulations of any jurisdiction in which the Company is subject to taxation. In addition, the independent auditor may not provide any tax services to the Company that are deemed to be incompatible with auditor independence per standards promulgated by the Public Company Accounting Oversight Board ("PCAOB").

The Audit Committee has given policy-based pre-approval for the Tax Services listed in Appendix C. All other Tax Services must be separately pre-approved by the Audit Committee, including Tax Services related to large and complex transactions and Tax Services proposed to be provided by the independent auditor to any executive officer or director of the Company, in his or her individual capacity, when such services are paid for by the Company.

D. All Other Services

The Audit Committee may grant policy-based pre-approval for those permissible non-audit services classified as All Other Services that it believes are routine, recurring services that would not impair the independence of the auditor. The Audit Committee has given policy-based pre-approval for the All Other Services listed in Appendix D. Any permissible All Other Services that are not listed in Appendix D must be separately pre-approved by the Audit Committee.

VI. Prohibited Services

A list of the SEC's prohibited non-audit services is attached to this policy as Appendix E. The list sets forth the several services that the SOX Act and the SEC have specifically identified as services that may not be performed by the Company's independent auditor. The Audit Committee will consult the SEC's rules and relevant guidance, with the assistance of counsel when necessary or appropriate, to determine whether any proposed service by the independent auditor falls within any category of prohibited non-audit services.

In addition, the independent auditor may not provide any service or product to the Company for a *contingent fee* (as defined and interpreted by the SEC pursuant to Rule 2-01(c)(5) of Regulation S-X) or a commission, or pursuant to an agreement (written or otherwise) by the Company to pay a "value added" fee based on the results of the independent auditor's performance of a service.

VII. Pre-Approval Fee Levels

Pre-approval fee levels for all services to be provided by the independent auditor have been established by the Audit Committee. All services that have received policy-based pre-approval are subject to the annual pre-approval fee levels set forth in the appendices to this policy. Any proposed services exceeding these amounts will require separate pre-approval by the Audit Committee or by any person to whom pre-approval authority is granted under Section III above. Unused pre-approval amounts from one year may not be carried forward to the next year.

VIII. Procedures

Requests or applications to provide services that require separate approval by the Audit Committee must be submitted to the Audit Committee by both the independent auditor and the Company's Chief Financial Officer (or his designee), and must be consistent with the SEC's rules on auditor independence. In connection with the Audit Committee's consideration of any proposed service, the independent auditor, at the Committee's request, will provide to the Audit Committee detailed documentation regarding the specific services to be provided so that the Committee can make a well-reasoned assessment of the impact of the service on the auditor's independence.

The Audit Committee hereby designates the Company's Vice President of Internal Audit (the "Monitor") to monitor the performance of all services provided by the independent auditor and to determine whether such services are in compliance with this policy. The Monitor will report to the Audit Committee on a periodic basis the results of his monitoring.

Pre-Approved AUDIT SERVICES

Service
assistance with and review of documents filed with the SEC including registration statements, reports on Forms 10-K and 10-Q, and other documents
services associated with other documents issued in connection with securities offerings (e.g., comfort letters, consents)
assistance in responding to SEC comment letters
statutory audits (e.g., FERC and insurance audits) and financial audits for subsidiaries of the Company, to include services normally provided by the Company's independent auditor in connection with statutory and regulatory filings
certificates, letters and opinions issued to regulators, agencies and other third-parties (e.g., insurance, banking, environmental) regarding the Company's assets and/or operations that only the Company's independent auditors reasonably can provide
consultations concerning principles of accounting and/or financial reporting treatment under standards or interpretations by the SEC, PCAOB, FASB or other regulatory or standard-setting bodies necessary to reach an audit judgment and/or opinion on the Company's financial statements
<u>Annual pre-approval fee limit for Audit Services (other than services pertaining to registration statements or prospectuses in connection with securities offerings)</u>
\$1,000,000
<u>Annual pre-approval fee limit for Audit Services pertaining to registration statements or prospectuses in connection with securities offerings</u>
\$250,000 per registration statement or prospectus

Pre-Approved AUDIT-RELATED SERVICES

<u>Service</u>
due diligence services pertaining to potential business acquisitions or dispositions
financial statement audits of employee benefit plans
accounting consultations and audits in connection with acquisitions
consultations concerning principles of accounting and/or financial reporting treatment under standards or interpretations by the SEC, PCAOB, FASB or other regulatory or standard-setting bodies <i>outside</i> those consultations necessary to perform an audit or review of Valero's financial statements in accordance with generally accepted auditing standards
<u>Annual pre-approval fee limit for Audit-Related Services</u>
\$500,000

Pre-Approved TAX SERVICES

<u>Service</u>
<i>Note:</i> The following are subject to the terms of subsection C. of Section V. of this policy.
U.S. federal, state and local tax compliance, including the preparation of original and amended tax returns and claims for refunds
U.S. federal, state and local tax planning and advice, including assistance with tax audits and appeals (but expressly excluding advocacy or litigation services), tax advice related to mergers and acquisitions, tax advice relating to employee benefit plans, and requests for rulings or technical advice from taxing authorities
review of Canadian federal and provincial income tax returns
Canadian federal and provincial tax planning and advice, including assistance with tax audits and appeals (but expressly excluding advocacy or litigation services), and advice relating to the tax effects of certain employee benefit arrangements
review of federal, state, local and international income, franchise, and other tax returns
<u>Annual pre-approval fee limit for Tax Services</u>
\$250,000

Pre-Approved ALL OTHER SERVICES

Services
Permissible non-audit services that would not impair the independence of the auditor. Expressly excluded from this pre-approval are the prohibited non-audit services listed on Appendix E of this policy.
Annual pre-approval fee limit for All Other Services
\$ 150,000

Prohibited Non-Audit Services

- Bookkeeping or other services related to the accounting records or financial statements of the audit client*
- Financial information systems design and implementation*
- Appraisal or valuation services, fairness opinions or contribution-in-kind reports*
- Actuarial services*
- Internal audit outsourcing services*
- Management functions
- Human resources
- Broker-dealer, investment adviser or investment banking services
- Legal services
- Expert services unrelated to the audit

* Provision of these non-audit services may be permitted if it is reasonable to conclude that the results of these services will not be subject to audit procedures. Materiality is not an appropriate basis upon which to overcome the rebuttable presumption that prohibited services will be subject to audit procedures.