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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 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

(Address of principal executive offices)

78249

(Zip Code)

(210) 345-2000

(Registrant's telephone number, including area code)

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

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

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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of shares of the registrant's only class of common stock, \$0.01 par value, outstanding as of October 23, 2020 was 407,789,217.

VALERO ENERGY CORPORATION

TABLE OF CONTENTS

	Page
<u>PART I – FINANCIAL INFORMATION</u>	
<u>ITEM 1. FINANCIAL STATEMENTS</u>	
<u>Consolidated Balance Sheets as of September 30, 2020 and December 31, 2019</u>	<u>1</u>
<u>Consolidated Statements of Income</u> <u>for the Three and Nine Months Ended September 30, 2020 and 2019</u>	<u>2</u>
<u>Consolidated Statements of Comprehensive Income</u> <u>for the Three and Nine Months Ended September 30, 2020 and 2019</u>	<u>3</u>
<u>Consolidated Statements of Equity</u> <u>for the Three and Nine Months Ended September 30, 2020 and 2019</u>	<u>4</u>
<u>Consolidated Statements of Cash Flows</u> <u>for the Nine Months Ended September 30, 2020 and 2019</u>	<u>6</u>
<u>Condensed Notes to Consolidated Financial Statements</u>	<u>7</u>
<u>ITEM 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL</u> <u>CONDITION AND RESULTS OF OPERATIONS</u>	<u>39</u>
<u>ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u>	<u>75</u>
<u>ITEM 4. CONTROLS AND PROCEDURES</u>	<u>77</u>
<u>PART II – OTHER INFORMATION</u>	
<u>ITEM 1. LEGAL PROCEEDINGS</u>	<u>78</u>
<u>ITEM 1A. RISK FACTORS</u>	<u>78</u>
<u>ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS</u>	<u>79</u>
<u>ITEM 6. EXHIBITS</u>	<u>80</u>
<u>SIGNATURE</u>	<u>81</u>

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

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

	September 30, 2020 (unaudited)	December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 4,047	\$ 2,583
Receivables, net	5,601	8,988
Inventories	5,357	7,013
Prepaid expenses and other	417	385
Total current assets	15,422	18,969
Property, plant, and equipment, at cost	46,857	44,294
Accumulated depreciation	(16,128)	(15,030)
Property, plant, and equipment, net	30,729	29,264
Deferred charges and other assets, net	5,581	5,631
Total assets	\$ 51,732	\$ 53,864
LIABILITIES AND EQUITY		
Current liabilities:		
Current portion of debt and finance lease obligations	\$ 636	\$ 494
Accounts payable	5,237	10,205
Accrued expenses	926	949
Taxes other than income taxes payable	1,266	1,304
Income taxes payable	57	208
Total current liabilities	8,122	13,160
Debt and finance lease obligations, less current portion	14,577	9,178
Deferred income tax liabilities	5,297	5,103
Other long-term liabilities	3,720	3,887
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	6,834	6,821
Treasury stock, at cost; 265,722,687 and 264,209,742 common shares	(15,759)	(15,648)
Retained earnings	29,712	31,974
Accumulated other comprehensive loss	(1,571)	(1,351)
Total Valero Energy Corporation stockholders' equity	19,223	21,803
Noncontrolling interests	793	733
Total equity	20,016	22,536
Total liabilities and equity	\$ 51,732	\$ 53,864

See Condensed Notes to Consolidated Financial Statements.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenues (a)	\$ 15,809	\$ 27,249	\$ 48,308	\$ 80,445
Cost of sales:				
Cost of materials and other	14,801	24,335	43,832	72,396
Lower of cost or market (LCM) inventory valuation adjustment	(313)	—	(19)	—
Operating expenses (excluding depreciation and amortization expense reflected below)	1,117	1,239	3,268	3,629
Depreciation and amortization expense	602	556	1,737	1,645
Total cost of sales	16,207	26,130	48,818	77,670
Other operating expenses	25	10	30	14
General and administrative expenses (excluding depreciation and amortization expense reflected below)	186	217	532	625
Depreciation and amortization expense	12	11	37	39
Operating income (loss)	(621)	881	(1,109)	2,097
Other income, net	48	34	107	68
Interest and debt expense, net of capitalized interest	(143)	(111)	(410)	(335)
Income (loss) before income tax expense (benefit)	(716)	804	(1,412)	1,830
Income tax expense (benefit)	(337)	165	(614)	376
Net income (loss)	(379)	639	(798)	1,454
Less: Net income attributable to noncontrolling interests	85	30	264	92
Net income (loss) attributable to Valero Energy Corporation stockholders	\$ (464)	\$ 609	\$ (1,062)	\$ 1,362
Earnings (loss) per common share	\$ (1.14)	\$ 1.48	\$ (2.62)	\$ 3.28
Weighted-average common shares outstanding (in millions)	407	412	407	415
Earnings (loss) per common share – assuming dilution	\$ (1.14)	\$ 1.48	\$ (2.62)	\$ 3.28
Weighted-average common shares outstanding – assuming dilution (in millions)	407	413	407	416
Supplemental information:				
(a) Includes excise taxes on sales by certain of our international operations	\$ 1,339	\$ 1,399	\$ 3,491	\$ 4,139

See Condensed Notes to Consolidated Financial Statements.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Net income (loss)	\$ (379)	\$ 639	\$ (798)	\$ 1,454
Other comprehensive income (loss):				
Foreign currency translation adjustment	217	(180)	(252)	(25)
Net gain on pension and other postretirement benefits	12	3	36	8
Net gain (loss) on cash flow hedges	5	(4)	9	1
Other comprehensive income (loss) before income tax expense	234	(181)	(207)	(16)
Income tax expense related to items of other comprehensive income (loss)	4	—	9	2
Other comprehensive income (loss)	230	(181)	(216)	(18)
Comprehensive income (loss)	(149)	458	(1,014)	1,436
Less: Comprehensive income attributable to noncontrolling interests	87	28	268	96
Comprehensive income (loss) attributable to Valero Energy Corporation stockholders	\$ (236)	\$ 430	\$ (1,282)	\$ 1,340

See Condensed Notes to Consolidated Financial Statements.

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

	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 June 30, 2020	\$ 7	\$ 6,824	\$ (15,760)	\$ 30,575	\$ (1,799)	\$ 19,847	\$ 787	\$ 20,634
Net income (loss)	—	—	—	(464)	—	(464)	85	(379)
Dividends on common stock (\$0.98 per share)	—	—	—	(399)	—	(399)	—	(399)
Stock-based compensation expense	—	12	—	—	—	12	—	12
Transactions in connection with stock-based compensation plans	—	(2)	1	—	—	(1)	—	(1)
Distributions to noncontrolling interests	—	—	—	—	—	—	(81)	(81)
Other comprehensive income	—	—	—	—	228	228	2	230
Balance as of September 30, 2020	<u>\$ 7</u>	<u>\$ 6,834</u>	<u>\$ (15,759)</u>	<u>\$ 29,712</u>	<u>\$ (1,571)</u>	<u>\$ 19,223</u>	<u>\$ 793</u>	<u>\$ 20,016</u>
Balance as of June 30, 2019	\$ 7	\$ 6,812	\$ (15,170)	\$ 31,046	\$ (1,350)	\$ 21,345	\$ 492	\$ 21,837
Net income	—	—	—	609	—	609	30	639
Dividends on common stock (\$0.90 per share)	—	—	—	(372)	—	(372)	—	(372)
Stock-based compensation expense	—	9	—	—	—	9	—	9
Transactions in connection with stock-based compensation plans	—	(3)	4	—	—	1	—	1
Open market stock purchases	—	—	(306)	—	—	(306)	—	(306)
Distributions to noncontrolling interests	—	—	—	—	—	—	(39)	(39)
Other comprehensive loss	—	—	—	—	(179)	(179)	(2)	(181)
Balance as of September 30, 2019	<u>\$ 7</u>	<u>\$ 6,818</u>	<u>\$ (15,472)</u>	<u>\$ 31,283</u>	<u>\$ (1,529)</u>	<u>\$ 21,107</u>	<u>\$ 481</u>	<u>\$ 21,588</u>

See Condensed Notes to Consolidated Financial Statements.

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

	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, 2019	\$ 7	\$ 6,821	\$ (15,648)	\$ 31,974	\$ (1,351)	\$ 21,803	\$ 733	\$ 22,536
Net income (loss)	—	—	—	(1,062)	—	(1,062)	264	(798)
Dividends on common stock (\$2.94 per share)	—	—	—	(1,200)	—	(1,200)	—	(1,200)
Stock-based compensation expense	—	48	—	—	—	48	—	48
Transactions in connection with stock-based compensation plans	—	(35)	19	—	—	(16)	—	(16)
Open market stock purchases	—	—	(130)	—	—	(130)	—	(130)
Distributions to noncontrolling interests	—	—	—	—	—	—	(208)	(208)
Other comprehensive income (loss)	—	—	—	—	(220)	(220)	4	(216)
Balance as of September 30, 2020	<u>\$ 7</u>	<u>\$ 6,834</u>	<u>\$ (15,759)</u>	<u>\$ 29,712</u>	<u>\$ (1,571)</u>	<u>\$ 19,223</u>	<u>\$ 793</u>	<u>\$ 20,016</u>
Balance as of December 31, 2018	\$ 7	\$ 7,048	\$ (14,925)	\$ 31,044	\$ (1,507)	\$ 21,667	\$ 1,064	\$ 22,731
Net income	—	—	—	1,362	—	1,362	92	1,454
Dividends on common stock (\$2.70 per share)	—	—	—	(1,123)	—	(1,123)	—	(1,123)
Stock-based compensation expense	—	30	—	—	—	30	—	30
Transactions in connection with stock-based compensation plans	—	(6)	5	—	—	(1)	—	(1)
Open market stock purchases	—	—	(552)	—	—	(552)	—	(552)
Acquisition of Valero Energy Partners LP (VLP) publicly held common units	—	(328)	—	—	—	(328)	(622)	(950)
Distributions to noncontrolling interests	—	—	—	—	—	—	(57)	(57)
Other	—	74	—	—	—	74	—	74
Other comprehensive income (loss)	—	—	—	—	(22)	(22)	4	(18)
Balance as of September 30, 2019	<u>\$ 7</u>	<u>\$ 6,818</u>	<u>\$ (15,472)</u>	<u>\$ 31,283</u>	<u>\$ (1,529)</u>	<u>\$ 21,107</u>	<u>\$ 481</u>	<u>\$ 21,588</u>

See Condensed Notes to Consolidated Financial Statements.

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

	Nine Months Ended September 30,	
	2020	2019
Cash flows from operating activities:		
Net income (loss)	\$ (798)	\$ 1,454
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization expense	1,774	1,684
LCM inventory valuation adjustment	(19)	—
Deferred income tax expense	177	19
Changes in current assets and current liabilities	(232)	728
Changes in deferred charges and credits and other operating activities, net	(50)	(62)
Net cash provided by operating activities	852	3,823
Cash flows from investing activities:		
Capital expenditures (excluding variable interest entities (VIEs))	(775)	(1,179)
Capital expenditures of VIEs:		
Diamond Green Diesel Holdings LLC (DGD)	(311)	(91)
Other VIEs	(196)	(139)
Deferred turnaround and catalyst cost expenditures (excluding VIEs)	(529)	(583)
Deferred turnaround and catalyst cost expenditures of DGD	(18)	(16)
Investments in unconsolidated joint ventures	(39)	(122)
Acquisitions of undivided interests	—	(65)
Other investing activities, net	16	5
Net cash used in investing activities	(1,852)	(2,190)
Cash flows from financing activities:		
Proceeds from debt issuances and borrowings (excluding VIEs)	4,320	1,892
Proceeds from borrowings of VIEs	202	148
Repayments of debt and finance lease obligations (excluding VIEs)	(461)	(1,802)
Repayments of debt of VIEs	(4)	(4)
Purchases of common stock for treasury	(147)	(555)
Common stock dividends	(1,200)	(1,123)
Acquisition of VLP publicly held common units	—	(950)
Distributions to noncontrolling interests	(208)	(57)
Other financing activities, net	(32)	(23)
Net cash provided by (used in) financing activities	2,470	(2,474)
Effect of foreign exchange rate changes on cash	(6)	(4)
Net increase (decrease) in cash and cash equivalents	1,464	(845)
Cash and cash equivalents at beginning of period	2,583	2,982
Cash and cash equivalents at end of period	\$ 4,047	\$ 2,137

See Condensed Notes to Consolidated Financial Statements.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. BASIS OF PRESENTATION AND SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

General

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.

These unaudited financial statements have been prepared in accordance with United States (U.S.) generally accepted accounting principles (GAAP) for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities Exchange Act of 1934. Accordingly, they do not include all of the information and notes required by U.S. GAAP for complete financial statements. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. All such adjustments are of a normal recurring nature unless disclosed otherwise. Operating results for the nine months ended September 30, 2020 are not necessarily indicative of the results that may be expected for the year ending December 31, 2020. As discussed in Note 2, the outbreak of COVID-19 and its development into a pandemic in March 2020 resulted in significant economic disruption globally. This disruption became more acute in the latter half of March 2020. While demand and market prices for most of our products increased during the second and third quarters of 2020 compared to the end of the first quarter 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, 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 United Kingdom (U.K.) in our North Atlantic region), have experienced a resurgence in the spread of COVID-19 prompting many governmental authorities to reimpose certain restrictions. Therefore, our operating results for the nine months ended September 30, 2020 do not fully reflect the impact this disruption will likely continue to have on us.

The balance sheet as of December 31, 2019 has been derived from our audited financial statements as of that date. For further information, refer to our financial statements and notes thereto included in our annual report on Form 10-K for the year ended December 31, 2019.

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 “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.

Significant Accounting Policies

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

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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.

Adoption of Accounting Pronouncements

We adopted the following 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 ASU was issued on 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

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 six 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 have restarted the gasoline-making units and five ethanol plants that had been temporarily idled. Demand for our products taken as a whole, however, has not returned to pre-pandemic levels, so we continue to operate our refineries at reduced rates, and 11 of our 14 ethanol plants have recently returned to full production.

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, or whether any recovery will ultimately

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

experience a reversal or other setbacks. However, the adverse impacts of the economic effects from COVID-19 and uncertainty in the global oil markets on our business have been and will likely continue to be significant. We believe we have proactively addressed many of the known impacts of COVID-19 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. As a result of this review, we reduced the estimated useful life of one of our ethanol plants and evaluated five other ethanol plants for potential impairment as of September 30, 2020, considering current economic conditions on our future estimated cash flows. Based on our analysis, we determined that the carrying amount of the plants was recoverable, as the undiscounted future cash flows from each plant exceeded its respective carrying value. The impact from the reduction in estimated useful life did not have a material impact on our results of operations or financial position. 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 September 30, 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 stock price, we determined our goodwill was not impaired as of September 30, 2020. Nonetheless, we will continue to evaluate the economic conditions and their impact on our assumptions.

Inventory Valuation

See Note 4 regarding our LCM inventory valuation reserve and the estimates used to determine the market value of our inventories, as well as our recognition of an expected liquidation of last-in, first-out (LIFO) inventory layers.

3. 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

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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.

4. INVENTORIES

Inventories consisted of the following (in millions):

	September 30, 2020	December 31, 2019
Refinery feedstocks	\$ 1,625	\$ 2,399
Refined petroleum products and blendstocks	3,180	4,034
Renewable diesel feedstocks and products	29	46
Ethanol feedstocks and products	240	260
Materials and supplies	283	274
Inventories	<u>\$ 5,357</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 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 our historical LIFO inventory costs 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 \$313 million during the three months ended September 30, 2020. The net benefit of \$19 million for the nine months ended September 30, 2020 is due to the foreign currency translation effect of the portion of the LCM inventory valuation adjustment attributable to our international operations. As of September 30, 2020, the replacement cost (market value) of LIFO inventories approximated their LIFO carrying amounts. As of December 31, 2019, the market value of LIFO inventories exceeded their LIFO carrying amounts by \$2.5 billion.

During the three and nine months ended September 30, 2020, we recognized the impact of an expected liquidation of LIFO inventory layers that increased cost of materials and other by \$326 million. Our LIFO

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

inventory levels decreased throughout the first nine months of 2020 due to lower production resulting from lower demand for our products caused by the negative economic impacts of COVID-19 on our business. Because these impacts are ongoing, we expect that substantially all of our LIFO inventory levels as of December 31, 2020 will remain below their December 31, 2019 levels.

Our non-LIFO inventories accounted for \$911 million and \$1.4 billion of our total inventories as of September 30, 2020 and December 31, 2019, respectively.

5. LEASES

Lease Costs and Other Supplemental Information

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					
Three months ended September 30, 2020								
Finance lease cost:								
Amortization of right-of-use (ROU) assets	\$ 29	\$ —	\$ 1	\$ 3	\$ 1	\$ —	\$ —	\$ 34
Interest on lease liabilities	24	—	—	1	1	—	—	26
Operating lease cost	39	39	16	4	2	7	1	108
Variable lease cost	14	4	—	—	—	—	—	18
Short-term lease cost	2	8	—	9	—	—	—	19
Sublease income	—	(2)	—	—	—	(1)	—	(3)
Total lease cost	<u>\$ 108</u>	<u>\$ 49</u>	<u>\$ 17</u>	<u>\$ 17</u>	<u>\$ 4</u>	<u>\$ 6</u>	<u>\$ 1</u>	<u>\$ 202</u>
Three months ended September 30, 2019								
Finance lease cost:								
Amortization of ROU assets	\$ 12	\$ —	\$ —	\$ 2	\$ —	\$ —	\$ —	\$ 14
Interest on lease liabilities	13	—	—	—	—	—	—	13
Operating lease cost	46	39	14	4	3	7	1	114
Variable lease cost	20	4	—	1	—	1	—	26
Short-term lease cost	1	13	—	8	—	—	—	22
Sublease income	—	(8)	—	—	—	(1)	—	(9)
Total lease cost	<u>\$ 92</u>	<u>\$ 48</u>	<u>\$ 14</u>	<u>\$ 15</u>	<u>\$ 3</u>	<u>\$ 7</u>	<u>\$ 1</u>	<u>\$ 180</u>

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	Pipelines, Terminals, and Tanks	Transportation		Feedstock Processing Equipment	Energy and Gases	Real Estate	Other	Total
		Marine	Rail					
Nine months ended September 30, 2020								
Finance lease cost:								
Amortization of ROU assets	\$ 79	\$ —	\$ 1	\$ 9	\$ 3	\$ —	\$ —	\$ 92
Interest on lease liabilities	70	—	—	2	2	—	—	74
Operating lease cost	123	115	46	12	6	19	3	324
Variable lease cost	47	37	1	1	—	1	—	87
Short-term lease cost	8	44	—	30	—	—	—	82
Sublease income	—	(10)	—	—	—	(1)	—	(11)
Total lease cost	<u>\$ 327</u>	<u>\$ 186</u>	<u>\$ 48</u>	<u>\$ 54</u>	<u>\$ 11</u>	<u>\$ 19</u>	<u>\$ 3</u>	<u>\$ 648</u>
Nine months ended September 30, 2019								
Finance lease cost:								
Amortization of ROU assets	\$ 32	\$ —	\$ —	\$ 4	\$ 2	\$ —	\$ —	\$ 38
Interest on lease liabilities	35	—	—	1	2	—	—	38
Operating lease cost	140	107	38	16	7	21	3	332
Variable lease cost	53	21	—	1	—	1	—	76
Short-term lease cost	8	39	—	22	—	—	—	69
Sublease income	—	(24)	—	—	—	(3)	—	(27)
Total lease cost	<u>\$ 268</u>	<u>\$ 143</u>	<u>\$ 38</u>	<u>\$ 44</u>	<u>\$ 11</u>	<u>\$ 19</u>	<u>\$ 3</u>	<u>\$ 526</u>

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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

	September 30, 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	\$ —	\$ 2,208	\$ —	\$ 790
Deferred charges and other assets, net	1,234	—	1,329	—
Total ROU assets, net	<u>\$ 1,234</u>	<u>\$ 2,208</u>	<u>\$ 1,329</u>	<u>\$ 790</u>
Current lease liabilities reflected in the following balance sheet line items:				
Current portion of debt and finance lease obligations	\$ —	\$ 80	\$ —	\$ 41
Accrued expenses	301	—	331	—
Noncurrent lease liabilities reflected in the following balance sheet line items:				
Debt and finance lease obligations, less current portion	—	2,166	—	750
Other long-term liabilities	904	—	959	—
Total lease liabilities	<u>\$ 1,205</u>	<u>\$ 2,246</u>	<u>\$ 1,290</u>	<u>\$ 791</u>
Other supplemental information				
Weighted-average remaining lease term	7.6 years	22.1 years	7.7 years	19.7 years
Weighted-average discount rate	4.7 %	4.3 %	4.9 %	5.2 %

Supplemental cash flow information related to our operating and finance leases is presented in Note 13.

Significant Lease Commencement

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, to construct, own, and operate the Magellan Valero Pasadena marine terminal (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 the initial two phases of construction, which occurred in the first quarter of 2020. During the nine months ended September 30, 2020, we recognized a finance lease ROU asset and related liability of approximately \$1.4 billion in connection with this agreement. The terminaling agreement has an initial term of 12 years with two five-year automatic renewals, and year-to-year renewals thereafter.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Maturity Analysis

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

	September 30, 2020		December 31, 2019	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
2020 (a)	\$ 103	\$ 45	\$ 376	\$ 88
2021	302	179	250	86
2022	223	174	194	87
2023	187	179	160	91
2024	150	170	125	82
Thereafter	525	2,925	498	1,011
Total undiscounted lease payments	1,490	3,672	1,603	1,445
Less: Amount associated with discounting	285	1,426	313	654
Total lease liabilities	\$ 1,205	\$ 2,246	\$ 1,290	\$ 791

(a) The amounts as of September 30, 2020 are for the remaining three months of 2020.

6. DEBT

Public Debt

During the nine months ended September 30, 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 LIBOR plus 1.150 percent, 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;
 - \$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.

Proceeds from these debt issuances totaled \$2.521 billion before deducting the underwriting discount and other debt issuance costs. The interest rate applicable to the Floating Rate Notes was 1.3995 percent as of September 30, 2020.

- 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 these debt issuances totaled \$1.499 billion before deducting the underwriting discount and other debt issuance costs.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

During the nine months ended September 30, 2019, the following activity occurred:

- We issued \$1.0 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 (6.125 percent Senior Notes) for \$871 million, or 102.48 percent of stated value, which included an early redemption fee of \$21 million that is reflected in “other income, net” in our statement of income for the nine months ended September 30, 2019.
- In connection with the completion of the Merger Transaction, 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 as of September 30, 2020:
 - \$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. Securities and Exchange Commission’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.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Credit Facilities

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):

			September 30, 2020			
	Facility Amount	Maturity Date	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 2020	C\$ —	C\$ 5	C\$ 145	
Accounts receivable sales facility (b)	\$ 1,000	July 2021	\$ —	n/a	\$ 817	
Letter of credit facility	\$ 50	November 2020	n/a	\$ —	\$ 50	
Committed facilities of VIE (c):						
IEnova Revolver	\$ 660	February 2028	\$ 550	n/a	\$ 110	
Uncommitted facilities:						
Letter of credit facilities	n/a	n/a	n/a	\$ 46	n/a	

(a) Letters of credit issued as of September 30, 2020 expire at various times in 2020 through 2023.

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

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

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, 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.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Accounts Receivable Sales Facility

During the nine months ended September 30, 2020, we sold \$300 million of eligible receivables under our accounts receivable sales facility and repaid \$400 million. During the nine months ended September 30, 2019, we sold \$900 million of eligible receivables under our accounts receivable sales facility and repaid \$900 million. There was no outstanding balance as of September 30, 2020 and there was \$100 million outstanding as of December 31, 2019 under this facility. The interest rate on the borrowings outstanding under this facility as of December 31, 2019 was 2.387 percent.

IEnova Revolver

During the nine months ended September 30, 2020, Central Mexico Terminals (as described in Note 8) amended its combined unsecured revolving credit facility (IEnova Revolver) with IEnova (defined in Note 8) to increase the facility amount from \$491 million to \$660 million. During the nine months ended September 30, 2020 and 2019, Central Mexico Terminals borrowed \$202 million and \$148 million, respectively, and had no repayments during the nine months ended September 30, 2020 and 2019 under this revolver. As of September 30, 2020 and December 31, 2019, there was \$550 million and \$348 million, respectively, of borrowings outstanding under this revolver and the variable interest rate was 3.958 percent and 5.749 percent, respectively.

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.

Other Disclosures

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Interest and debt expense	\$ 162	\$ 133	\$ 468	\$ 405
Less: Capitalized interest	19	22	58	70
Interest and debt expense, net of capitalized interest	<u>\$ 143</u>	<u>\$ 111</u>	<u>\$ 410</u>	<u>\$ 335</u>

7. EQUITY

Share Activity

There was no significant share activity during the nine months ended September 30, 2020 and 2019.

Common Stock Dividends

On October 28, 2020, our board of directors declared a quarterly cash dividend of \$0.98 per common share payable on December 9, 2020 to holders of record at the close of business on November 18, 2020.

VALERO ENERGY CORPORATION
CONDENSED 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):

	Three Months Ended September 30,							
	2020				2019			
	Foreign Currency Translation Adjustment	Defined Benefit Plans Items	Gains (Losses) on Cash Flow Hedges	Total	Foreign Currency Translation Adjustment	Defined Benefit Plans Items	Gains (Losses) on Cash Flow Hedges	Total
Balance as of beginning of period	\$ (1,144)	\$ (653)	\$ (2)	\$ (1,799)	\$ (870)	\$ (481)	\$ 1	\$ (1,350)
Other comprehensive income (loss) before reclassifications	217	—	—	217	(180)	—	1	(179)
Amounts reclassified from accumulated other comprehensive loss	—	9	2	11	—	2	(2)	—
Other comprehensive income (loss)	217	9	2	228	(180)	2	(1)	(179)
Balance as of end of period	<u>\$ (927)</u>	<u>\$ (644)</u>	<u>\$ —</u>	<u>\$ (1,571)</u>	<u>\$ (1,050)</u>	<u>\$ (479)</u>	<u>\$ —</u>	<u>\$ (1,529)</u>

	Nine Months Ended September 30,							
	2020				2019			
	Foreign Currency Translation Adjustment	Defined Benefit Plans Items	Gains (Losses) on Cash Flow Hedges	Total	Foreign Currency Translation Adjustment	Defined Benefit Plans Items	Gains (Losses) on Cash Flow Hedges	Total
Balance as of beginning of period	\$ (676)	\$ (672)	\$ (3)	\$ (1,351)	\$ (1,022)	\$ (485)	\$ —	\$ (1,507)
Other comprehensive income (loss) before reclassifications	(251)	—	19	(232)	(28)	—	2	(26)
Amounts reclassified from accumulated other comprehensive loss	—	28	(16)	12	—	6	(2)	4
Other comprehensive income (loss)	(251)	28	3	(220)	(28)	6	—	(22)
Balance as of end of period	<u>\$ (927)</u>	<u>\$ (644)</u>	<u>\$ —</u>	<u>\$ (1,571)</u>	<u>\$ (1,050)</u>	<u>\$ (479)</u>	<u>\$ —</u>	<u>\$ (1,529)</u>

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. VARIABLE INTEREST ENTITIES

Consolidated VIEs

We consolidate a VIE when we have a variable interest in an entity for which we are the primary beneficiary. As of September 30, 2020, our significant consolidated VIEs included:

- DGD, a joint venture with a subsidiary of Darling Ingredients Inc., which owns and operates a plant that processes animal fats, used cooking oils, and other vegetable oils into renewable diesel; and
- Central Mexico Terminals, which 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. We do not have an ownership interest in Central Mexico Terminals.

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 other 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.

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):

	September 30, 2020			
	DGD	Central Mexico Terminals	Other	Total
Assets				
Cash and cash equivalents	\$ 222	\$ —	\$ 16	\$ 238
Other current assets	234	31	24	289
Property, plant, and equipment, net	1,032	551	98	1,681
Liabilities				
Current liabilities, including current portion of debt and finance lease obligations	\$ 88	\$ 588	\$ 7	\$ 683
Debt and finance lease obligations, less current portion	—	—	26	26

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	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
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. EMPLOYEE BENEFIT PLANS

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

	Pension Plans		Other Postretirement Benefit Plans	
	2020	2019	2020	2019
Three months ended September 30				
Service cost	\$ 35	\$ 29	\$ 1	\$ 1
Interest cost	21	25	3	2
Expected return on plan assets	(44)	(41)	—	—
Amortization of:				
Net actuarial loss	18	10	—	—
Prior service credit	(4)	(5)	(2)	(2)
Special charges	2	—	—	—
Net periodic benefit cost	<u>\$ 28</u>	<u>\$ 18</u>	<u>\$ 2</u>	<u>\$ 1</u>
Nine months ended September 30				
Service cost	\$ 105	\$ 89	\$ 4	\$ 3
Interest cost	64	74	7	8
Expected return on plan assets	(134)	(124)	—	—
Amortization of:				
Net actuarial (gain) loss	55	30	—	(2)
Prior service credit	(14)	(14)	(5)	(6)
Special charges	3	2	—	1
Net periodic benefit cost	<u>\$ 79</u>	<u>\$ 57</u>	<u>\$ 6</u>	<u>\$ 4</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.

During the nine months ended September 30, 2020 and 2019, we contributed \$18 million and \$120 million, respectively, to our qualified pension plans. We expect to make a discretionary contribution of \$86 million to our qualified U.S. pension plan in December 2020.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. INCOME TAXES

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 the Tax Cuts and Jobs Act of 2017 by providing that tax net operating losses (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 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 three and nine months ended September 30, 2020 included a tax benefit of \$121 million and \$238 million, respectively, attributable to the expected tax NOL carryback provided under the CARES Act for expected tax NOLs from our current tax year 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 three and nine months ended September 30, 2020 is primarily due to the income tax benefit associated with the expected tax NOL carryback described above. In addition, the higher effective tax rate for the three and nine months ended September 30, 2020 was also affected by the impact of nontaxable income that has the effect of increasing the effective tax rate in periods where we incur a loss before income taxes.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

11. EARNINGS (LOSS) PER COMMON SHARE

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Earnings (loss) per common share				
Net income (loss) attributable to Valero stockholders	\$ (464)	\$ 609	\$ (1,062)	\$ 1,362
Less: Income allocated to participating securities	1	1	4	3
Net income (loss) available to common stockholders	<u>\$ (465)</u>	<u>\$ 608</u>	<u>\$ (1,066)</u>	<u>\$ 1,359</u>
Weighted-average common shares outstanding	<u>407</u>	<u>412</u>	<u>407</u>	<u>415</u>
Earnings (loss) per common share	<u>\$ (1.14)</u>	<u>\$ 1.48</u>	<u>\$ (2.62)</u>	<u>\$ 3.28</u>
Earnings (loss) per common share – assuming dilution				
Net income (loss) attributable to Valero stockholders	\$ (464)	\$ 609	\$ (1,062)	\$ 1,362
Less: Income allocated to participating securities	1	1	4	3
Net income (loss) available to common stockholders	<u>\$ (465)</u>	<u>\$ 608</u>	<u>\$ (1,066)</u>	<u>\$ 1,359</u>
Weighted-average common shares outstanding	407	412	407	415
Effect of dilutive securities	—	1	—	1
Weighted-average common shares outstanding – assuming dilution	<u>407</u>	<u>413</u>	<u>407</u>	<u>416</u>
Earnings (loss) per common share – assuming dilution	<u>\$ (1.14)</u>	<u>\$ 1.48</u>	<u>\$ (2.62)</u>	<u>\$ 3.28</u>

Participating securities include restricted stock and performance awards granted under our 2020 Omnibus Stock Incentive Plan (2020 OSIP) or our 2011 Omnibus Stock Incentive Plan (2011 OSIP). Dilutive securities include participating securities as well as outstanding stock options granted under our 2020 OSIP or our 2011 OSIP. On April 30, 2020, our stockholders approved the 2020 OSIP.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

12. 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):

	September 30, 2020		December 31, 2019		Decrease
Receivables from contracts with customers, included in receivables, net	\$ 3,169	\$	5,610	\$	(2,441)
Contract liabilities, included in accrued expenses	43		55		(12)

Receivables from contracts with customers is a component of “receivables, net” as presented on the balance sheet. The decrease in “receivables, net” is described in Note 13.

For the nine months ended September 30, 2020, we recognized as revenue \$53 million that was included in contract liabilities as of December 31, 2019.

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 September 30, 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 15 petroleum refineries, the associated marketing activities, and logistics assets that support our refining operations. The principal

VALERO ENERGY CORPORATION
CONDENSED 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 8. 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 14 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.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following tables reflect information about our operating income (loss) by reportable segment (in millions):

	Refining	Renewable Diesel	Ethanol	Corporate and Eliminations	Total
Three months ended September 30, 2020					
Revenues:					
Revenues from external customers	\$ 14,727	\$ 305	\$ 777	\$ —	\$ 15,809
Intersegment revenues	2	40	58	(100)	—
Total revenues	14,729	345	835	(100)	15,809
Cost of sales:					
Cost of materials and other	14,103	128	670	(100)	14,801
LCM inventory valuation adjustment	(296)	—	(17)	—	(313)
Operating expenses (excluding depreciation and amortization expense reflected below)	989	23	105	—	1,117
Depreciation and amortization expense	538	10	54	—	602
Total cost of sales	15,334	161	812	(100)	16,207
Other operating expenses	24	—	1	—	25
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	186	186
Depreciation and amortization expense	—	—	—	12	12
Operating income (loss) by segment	\$ (629)	\$ 184	\$ 22	\$ (198)	\$ (621)
Three months ended September 30, 2019					
Revenues:					
Revenues from external customers	\$ 26,145	\$ 212	\$ 891	\$ 1	\$ 27,249
Intersegment revenues	2	50	57	(109)	—
Total revenues	26,147	262	948	(108)	27,249
Cost of sales:					
Cost of materials and other	23,432	164	847	(108)	24,335
Operating expenses (excluding depreciation and amortization expense reflected below)	1,100	18	121	—	1,239
Depreciation and amortization expense	518	15	23	—	556
Total cost of sales	25,050	197	991	(108)	26,130
Other operating expenses	10	—	—	—	10
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	217	217
Depreciation and amortization expense	—	—	—	11	11
Operating income (loss) by segment	\$ 1,087	\$ 65	\$ (43)	\$ (228)	\$ 881

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	Refining	Renewable Diesel	Ethanol	Corporate and Eliminations	Total
Nine months ended September 30, 2020					
Revenues:					
Revenues from external customers	\$ 45,327	\$ 850	\$ 2,131	\$ —	\$ 48,308
Intersegment revenues	6	150	160	(316)	—
Total revenues	45,333	1,000	2,291	(316)	48,308
Cost of sales:					
Cost of materials and other	41,769	393	1,984	(314)	43,832
LCM inventory valuation adjustment	(19)	—	—	—	(19)
Operating expenses (excluding depreciation and amortization expense reflected below)	2,912	63	293	—	3,268
Depreciation and amortization expense	1,607	33	97	—	1,737
Total cost of sales	46,269	489	2,374	(314)	48,818
Other operating expenses	29	—	1	—	30
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	532	532
Depreciation and amortization expense	—	—	—	37	37
Operating income (loss) by segment	\$ (965)	\$ 511	\$ (84)	\$ (571)	\$ (1,109)
Nine months ended September 30, 2019					
Revenues:					
Revenues from external customers	\$ 77,109	\$ 686	\$ 2,648	\$ 2	\$ 80,445
Intersegment revenues	12	174	162	(348)	—
Total revenues	77,121	860	2,810	(346)	80,445
Cost of sales:					
Cost of materials and other	69,769	577	2,396	(346)	72,396
Operating expenses (excluding depreciation and amortization expense reflected below)	3,197	54	378	—	3,629
Depreciation and amortization expense	1,539	38	68	—	1,645
Total cost of sales	74,505	669	2,842	(346)	77,670
Other operating expenses	13	—	1	—	14
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	625	625
Depreciation and amortization expense	—	—	—	39	39
Operating income (loss) by segment	\$ 2,603	\$ 191	\$ (33)	\$ (664)	\$ 2,097

VALERO ENERGY CORPORATION
CONDENSED 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):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Refining:				
Gasolines and blendstocks	\$ 7,021	\$ 10,978	\$ 19,258	\$ 31,882
Distillates	6,327	12,861	21,369	38,254
Other product revenues	1,379	2,306	4,700	6,973
Total refining revenues	14,727	26,145	45,327	77,109
Renewable diesel:				
Renewable diesel	305	212	850	686
Ethanol:				
Ethanol	624	714	1,685	2,108
Distillers grains	153	177	446	540
Total ethanol revenues	777	891	2,131	2,648
Corporate – other revenues	—	1	—	2
Revenues	\$ 15,809	\$ 27,249	\$ 48,308	\$ 80,445

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

	September 30, 2020	December 31, 2019
Refining	\$ 42,643	\$ 47,067
Renewable diesel	1,538	1,412
Ethanol	1,677	1,615
Corporate and eliminations	5,874	3,770
Total assets	\$ 51,732	\$ 53,864

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. 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):

	Nine Months Ended September 30,	
	2020	2019
Decrease (increase) in current assets:		
Receivables, net	\$ 3,229	\$ (241)
Inventories	1,577	126
Prepaid expenses and other	70	(55)
Increase (decrease) in current liabilities:		
Accounts payable	(4,893)	914
Accrued expenses	17	(92)
Taxes other than income taxes payable	(24)	(25)
Income taxes payable	(208)	101
Changes in current assets and current liabilities	<u>\$ (232)</u>	<u>\$ 728</u>

Changes in current assets and current liabilities for the nine months ended September 30, 2020 were as follows:

- the decrease in receivables was due to (i) a decrease of \$3.6 billion as a result of a decrease in sales volumes combined with a decrease in commodity prices in September 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 \$770 million primarily due to the recognition of a current income tax benefit;
- the decrease in inventories was primarily due to lower inventory levels in September 2020 compared to December 2019; and
- 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 September 2020 compared to December 2019.

Changes in current assets and current liabilities for the nine months ended September 30, 2019 were as follows:

- the increase in receivables was due to an increase in commodity prices in September 2019 compared to December 2018 combined with an increase in sales volumes, partially offset by 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 decrease in inventories was due to lower inventory levels in September 2019 compared to December 2018; and

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- the increase in accounts payable was due to an increase in commodity prices in September 2019 compared to December 2018 combined with an increase in crude oil and other feedstock volumes purchased and the timing of payments of invoices.

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

	Nine Months Ended September 30,	
	2020	2019
Interest paid in excess of amount capitalized, including interest on finance leases	\$ 338	\$ 303
Income taxes paid (refunded), net	206	(184)

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

	Nine Months Ended September 30,			
	2020		2019	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows	\$ 329	\$ 74	\$ 329	\$ 38
Investing cash flows	1	—	1	—
Financing cash flows	—	51	—	31
Changes in lease balances resulting from new and modified leases (a)	211	1,506	1,673	221

- (a) Noncash activity for the nine months ended September 30, 2020 primarily includes \$1.4 billion for a finance lease ROU asset and related liability recognized in connection with the terminaling agreement with MVP described in Note 5. Noncash activity for the nine months ended September 30, 2019 included \$1.3 billion for operating lease ROU assets and related liabilities recorded on January 1, 2019 upon adoption of Financial Accounting Standards Board Accounting Standards Codification Topic 842, "Leases."

There were no significant noncash investing and financing activities during the nine months ended September 30, 2020, except as noted in the table above.

Noncash investing and financing activities during the nine months ended September 30, 2019 included the derecognition of the property, plant, and equipment and the related long-term liability associated with a build-to-suit lease arrangement with respect to the MVP Terminal, and the subsequent recognition of our investment in MVP, in addition to the activities noted in the table above.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. FAIR VALUE MEASUREMENTS

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 September 30, 2020 and December 31, 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.

	September 30, 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	\$ 398	\$ —	\$ —	\$ 398	\$ (347)	\$ (20)	\$ 31	\$ —		
Physical purchase contracts	—	2	—	2	n/a	n/a	2	n/a		
Foreign currency contracts	9	—	—	9	n/a	n/a	9	n/a		
Investments of certain benefit plans	71	—	8	79	n/a	n/a	79	n/a		
Total	<u>\$ 478</u>	<u>\$ 2</u>	<u>\$ 8</u>	<u>\$ 488</u>	<u>\$ (347)</u>	<u>\$ (20)</u>	<u>\$ 121</u>			
Liabilities										
Commodity derivative contracts	\$ 347	\$ —	\$ —	\$ 347	\$ (347)	\$ —	\$ —	\$ (39)		
Environmental credit obligations	—	23	—	23	n/a	n/a	23	n/a		
Physical purchase contracts	—	—	—	—	n/a	n/a	—	n/a		
Foreign currency contracts	3	—	—	3	n/a	n/a	3	n/a		
Total	<u>\$ 350</u>	<u>\$ 23</u>	<u>\$ —</u>	<u>\$ 373</u>	<u>\$ (347)</u>	<u>\$ —</u>	<u>\$ 26</u>			

VALERO ENERGY CORPORATION
CONDENSED 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 15. 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
CONDENSED 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 Renewable Identification Numbers (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. 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 a 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 September 30, 2020 and December 31, 2019 that were measured at fair value on a recurring basis.

There was no significant activity during the nine months ended September 30, 2020 and 2019 related to the fair value amounts categorized in Level 3 as of September 30, 2020 and December 31, 2019.

Nonrecurring Fair Value Measurements

There were no assets or liabilities that were measured at fair value on a nonrecurring basis as of September 30, 2020 and December 31, 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):

		September 30, 2020		December 31, 2019	
	Fair Value Hierarchy	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Financial assets					
Cash and cash equivalents	Level 1	\$ 4,047	\$ 4,047	\$ 2,583	\$ 2,583
Financial liabilities					
Debt (excluding finance leases)	Level 2	12,967	14,673	8,881	10,583

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

15. PRICE RISK MANAGEMENT ACTIVITIES

General

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 14), 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 crude oil, refined petroleum products (primarily gasoline and distillate), renewable diesel, grain (primarily corn), renewable diesel feedstocks, 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 (i) feedstock, refined petroleum product, or natural gas purchases, and/or (ii) refined petroleum product or renewable diesel 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 refined petroleum product inventories and fixed-price purchase contracts, and (ii) lock in the price of forecasted feedstock, refined petroleum product, or natural gas purchases, and/or refined petroleum product or renewable diesel sales at existing market prices that we deem favorable.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

As of September 30, 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		
	2020	2021	2022
Derivatives designated as cash flow hedges			
Renewable diesel:			
Futures – long	493	—	—
Futures – short	1,121	—	—
Derivatives designated as economic hedges			
Crude oil and refined petroleum products:			
Futures – long	48,804	184	—
Futures – short	47,208	81	—
Corn:			
Futures – long	36,910	960	10
Futures – short	46,280	3,840	130
Physical contracts – long	8,713	3,055	120

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 our 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 September 30, 2020, we had foreign currency contracts to purchase \$244 million of U.S. dollars, \$1.9 billion of U.S. dollar equivalent Canadian dollars, and \$150 million of U.S. dollar equivalent pounds sterling. Of these commitments, \$1.1 billion matured on or before October 26, 2020 and the remaining \$1.2 billion will mature by December 15, 2020.

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 products 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).

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

in 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. The cost of meeting our obligations under these compliance programs was \$143 million and \$69 million for the three months ended September 30, 2020 and 2019, respectively, and \$391 million and \$227 million for the nine months ended September 30, 2020 and 2019, respectively. These amounts are reflected in cost of materials and other.

We are subject to additional requirements under greenhouse gas (GHG) emission programs, including the cap-and-trade systems, as discussed in Note 14. 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 the majority of these costs from our customers for the three and nine months ended September 30, 2020 and 2019 and expect to continue to recover the majority of these costs in the future. For the three and nine months ended September 30, 2020 and 2019, 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 September 30, 2020 and December 31, 2019 (in millions) and the line items in the balance sheets in which the fair values are reflected. See Note 14 for additional information related to the fair values of our derivative instruments.

As indicated in Note 14, 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 table, however, is 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	September 30, 2020		December 31, 2019	
		Asset Derivatives	Liability Derivatives	Asset Derivatives	Liability Derivatives
Derivatives designated as hedging instruments					
Commodity contracts	Receivables, net	\$ 6	\$ 3	\$ 9	\$ 20
Derivatives not designated as hedging instruments					
Commodity contracts	Receivables, net	\$ 392	\$ 344	\$ 608	\$ 648
Physical purchase contracts	Inventories	2	—	—	3
Foreign currency contracts	Receivables, net	9	—	27	—
Foreign currency contracts	Accrued expenses	—	3	—	10
Total		\$ 403	\$ 347	\$ 635	\$ 661

VALERO ENERGY CORPORATION
CONDENSED 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 or 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	Three Months Ended September 30,		Nine Months Ended September 30,	
		2020	2019	2020	2019
Commodity contracts:					
Gain recognized in other comprehensive income (loss) on derivatives	N/A	\$ 2	\$ 3	\$ 52	\$ 7
Gain (loss) reclassified from accumulated other comprehensive income (loss) into income	Revenues	(3)	8	42	6

For cash flow hedges, no component of any derivative instrument's gains or losses was excluded from the assessment of hedge effectiveness for the three and nine months ended September 30, 2020 and 2019. For the three and nine months ended September 30, 2020, cash flow hedges primarily related to forward sales of renewable diesel. The estimated deferred after-tax gain 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 September 30, 2020 was immaterial. For the three and nine months ended September 30, 2020 and 2019, there were no amounts reclassified from accumulated other comprehensive income (loss) into income as a result of the discontinuance of cash flow hedge accounting. The changes in accumulated other comprehensive income (loss) by component, net of tax, for the three and nine months ended September 30, 2020 and 2019 are described in Note 7.

VALERO ENERGY CORPORATION
CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table provides information about the gain (loss) recognized in income on our derivative instruments of 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	Three Months Ended September 30,		Nine Months Ended September 30,	
		2020	2019	2020	2019
Commodity contracts	Revenues	\$ (4)	\$ (1)	\$ (3)	\$ 4
Commodity contracts	Cost of materials and other	118	(26)	106	(25)
Commodity contracts	Operating expenses (excluding depreciation and amortization expense)	—	—	2	—
Foreign currency contracts	Cost of materials and other	(6)	9	43	2
Foreign currency contracts	Other income, net	56	(19)	(49)	36

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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

This Form 10-Q, 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,” 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 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 facilities or other facilities that could impair our ability to produce or transport refined petroleum products or receive feedstocks;
- political and economic conditions in nations that produce crude oil or consume refined petroleum products, renewable diesel, or ethanol;
- 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;
- the level of consumer demand, including seasonal fluctuations;
- refinery 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 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, refineries, machinery, pipelines, equipment, or information systems, or any of the foregoing of our suppliers or customers;
- 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;
- the levels of government subsidies for, and mandates or other policies with respect to, alternative fuels and alternative-fuel vehicles;
- the volatility in the market price of biofuel credits (primarily RINs needed to comply with the U.S. federal Renewable Fuel Standard) 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, grain 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. Environmental Protection Agency's (EPA's) 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 our annual report on Form 10-K for the year ended December 31, 2019 that is incorporated by reference herein, as those factors are amended or supplemented as set forth in the “RISK FACTORS” section included in ITEM 1A, “RISK FACTORS” in this Form 10-Q.

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. GAAP. These non-GAAP financial measures include adjusted operating income (including adjusted operating income 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 periods and to help assess our cash flows. See the tables in note (f) beginning on page 59 for reconciliations of adjusted operating income (including adjusted operating income 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 72 for a reconciliation of capital investments attributable to Valero to its most directly comparable U.S. GAAP financial measure. Beginning on page 71, 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 and Europe, 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 have 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, there has been a decline in the demand for, and thus also the market prices of, most of the transportation fuels that we produce and sell. There has also been 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. 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.^{1,2}

Beginning in the latter part of the second quarter of 2020, 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 only recently began lifting restrictions on a more moderate basis. This has 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 first several months of the pandemic. However, 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), have experienced a resurgence in the spread of COVID-19 prompting many governmental authorities to reimpose certain restrictions. While this response has not yet significantly impacted the increased level of individual movement associated with the initial lifting of many restrictions, the risk remains that any further reimposition of prior restrictions or the imposition of new restrictions, could weaken the partial recovery in the demand and market prices for our products, which would negatively affect us.

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 gasoline³ 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 \$48.63 per barrel by the end of September (a 29 percent decline over the nine-month period). Another example is the price of diesel⁴ 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 \$46.38 per barrel by the end of September (a 43 percent decline over the nine-month period). On October 27, 2020, the prices of gasoline³ and diesel⁴ were \$45.26 per barrel and \$47.05 per barrel, respectively.

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.

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

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 to their previous

¹ See page 62 for our definition of refining margin and why we believe it is an important financial and operating measure.

² 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.

³ Gasoline prices quoted represent the price of U.S. Gulf Coast conventional blendstock of oxygenate blending gasoline.

⁴ Diesel prices quoted represent the price of U.S. Gulf Coast ultra-low sulfur diesel.

carrying values. These inventory valuation adjustments are referred to as “lower of cost or market (LCM) inventory valuation adjustments” and are described in Note 4 of Condensed Notes to Consolidated Financial Statements. For the third quarter of 2020, we generated an operating loss of \$621 million, which includes a \$313 million recovery in the value of our inventories. 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, we reversed \$2.2 billion of the writedown in the second quarter and the remaining amount in the third quarter. For the first nine months of 2020, we generated an operating loss of \$1.1 billion. Our operating results for the third quarter and the first nine months of 2020, including operating results by segment, are described in the summary below, and detailed descriptions can be found under “RESULTS OF OPERATIONS” on pages 47 through 68.

Our cash and cash equivalents increased by \$1.4 billion during the first nine months of 2020, from \$2.6 billion as of December 31, 2019 to \$4.0 billion as of September 30, 2020. We invested \$1.9 billion in our business and returned \$1.3 billion to our stockholders primarily through dividends. 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 6 of Condensed Notes to Consolidated Financial Statements. In addition, our operations generated net cash of \$852 million, which was driven by a decrease in inventory on hand. We had \$9.6 billion of liquidity⁵ as of September 30, 2020. A summary of our cash flows is presented on page 70, 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 COVID-19 on our liquidity, can be found under “LIQUIDITY AND CAPITAL RESOURCES” on pages 68 through 73.

We have responded in multiple ways to the impacts from COVID-19 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 temporarily idled eight of our ethanol plants and reduced production at our remaining six 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 have restarted the gasoline-making units and five ethanol plants that had been temporarily idled. Demand, however, has not returned to pre-pandemic levels, so we continue to operate our refineries at reduced rates, and 11 of our 14 ethanol plants have recently returned to full production. 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., value-added taxes (VAT) and motor fuel taxes) tax payments of approximately \$440 million. These deferrals have been provided to taxpayers under new legislation, such as the CARES Act in the U.S., and by various taxing authorities under existing legislation. Approximately 40 percent of the deferred payments were paid in the third quarter of 2020, with the remaining amount due in 2021 and 2022. Of the remaining amount due, approximately 70 percent will be paid in 2021 and 30 percent in 2022.

⁵ See the components of our liquidity as of September 30, 2020 in the table on page 69 under “LIQUIDITY AND CAPITAL RESOURCES—Our Liquidity.”

- 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 6 of Condensed Notes to Consolidated Financial Statements. As of September 30, 2020 and October 27, 2020, 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 6 of Condensed Notes to Consolidated Financial Statements. As of September 30, 2020 and October 27, 2020, we had no outstanding borrowings under this facility, and available borrowing capacity was \$742 million as of October 27, 2020.

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, 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 COVID-19 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.

Third Quarter Results

For the third quarter of 2020, we reported a net loss attributable to Valero stockholders of \$464 million compared to net income attributable to Valero stockholders of \$609 million for the third quarter of 2019, which represents a decrease of \$1.1 billion. The decrease was primarily due to lower operating income of \$1.5 billion, partially offset by a \$502 million decrease in income taxes.

While our operating income decreased by \$1.5 billion in the third quarter of 2020 compared to the third quarter of 2019, adjusted operating income also decreased by \$1.5 billion. Adjusted operating income excludes the adjustments reflected in the table in note (f) on page 60.

The \$1.5 billion decrease in adjusted operating income was primarily due to the following:

- *Refining segment.* Refining segment adjusted operating income decreased by \$1.7 billion primarily due to decreases in gasoline and distillate margins and lower throughput volumes, partially offset by lower operating expenses (excluding depreciation and amortization expense). This is more fully described on pages 51 and 52.
- *Renewable diesel segment.* Renewable diesel segment adjusted operating income increased by \$61 million primarily due to higher renewable diesel sales volumes. This is more fully described on page 53.
- *Ethanol segment.* Ethanol segment adjusted operating income increased by \$79 million primarily due to lower corn prices and operating expenses (excluding depreciation and amortization expense), partially offset by lower ethanol prices. This is more fully described on pages 53 and 54.

First Nine Months Results

For the first nine months of 2020, we reported a net loss attributable to Valero stockholders of \$1.1 billion compared to net income attributable to Valero stockholders of \$1.4 billion for the first nine months of 2019, which represents a decrease of \$2.4 billion. The decrease was primarily due to lower operating income of \$3.2 billion, partially offset by a \$990 million decrease in income taxes. The decrease in operating income included a \$326 million charge for the impact of an expected liquidation of LIFO inventory layers which is described in Note 4 of Condensed Notes to Consolidated Financial Statements and in note (a) on page 58.

While our operating income decreased by \$3.2 billion in the first nine months of 2020 compared to the first nine months of 2019, adjusted operating income decreased by \$3.1 billion. Adjusted operating income excludes the LIFO liquidation adjustment and other adjustments to operating income reflected in the table in note (f) on page 60.

The \$3.1 billion decrease in adjusted operating income was primarily due to the following:

- *Refining segment.* Refining segment adjusted operating income decreased by \$3.3 billion primarily due to decreases in gasoline and distillate margins and lower throughput volumes, partially offset by higher margins on other products and lower operating expenses (excluding depreciation and amortization expense). This is more fully described on pages 65 and 66.
- *Renewable diesel segment.* Renewable diesel segment adjusted operating income increased by \$122 million primarily due to higher renewable diesel sales volumes and a favorable impact from commodity derivative instruments associated with our price risk management activities, partially offset by lower renewable diesel prices. This is more fully described on pages 66 and 67.
- *Ethanol segment.* Ethanol segment adjusted operating income decreased by \$21 million primarily due to lower ethanol prices and production volumes, partially offset by lower corn prices, lower operating expenses (excluding depreciation and amortization expense), and higher prices on corn related co-products. This is more fully described on pages 67 and 68.

Outlook

As previously discussed, many uncertainties remain with respect to COVID-19 and the political and economic environment going forward, and while it is difficult to predict the ultimate economic impacts on us, we have noted several factors below that have impacted or may impact our results of operations during the fourth quarter of 2020.

- Gasoline, jet fuel, and diesel prices are expected to improve as excess inventory continues to draw toward historical levels and product demand recovers.
- Sour crude oil discounts are expected to improve with anticipated OPEC production increases 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 remain consistent with current levels.

As a result of the U.K.'s election to withdraw from the European Union (EU) in a national referendum (Brexit) in June 2016, the U.K. withdrew from the EU on January 31, 2020. Currently, the U.K. and the EU continue to negotiate a new free trade agreement. However, it is uncertain whether an agreement will be reached by December 31, 2020, and, if so, the specific terms of such agreement. In the event an agreement is not reached, it is possible that reciprocal tariffs will be introduced between the U.K. and the EU. Under this scenario, we do not anticipate any such reciprocal tariffs would have a material adverse effect on our refining operations in the U.K.

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 59, highlight our results of operations, our operating performance, and market reference prices and margins that directly impact our operations.

Third Quarter Results - Financial Highlights By Segment and Total Company (millions of dollars)

	Three Months Ended September 30, 2020				
	Refining	Renewable Diesel	Ethanol	Corporate and Eliminations	Total
Revenues:					
Revenues from external customers	\$ 14,727	\$ 305	\$ 777	\$ —	\$ 15,809
Intersegment revenues	2	40	58	(100)	—
Total revenues	14,729	345	835	(100)	15,809
Cost of sales:					
Cost of materials and other (a) (b)	14,103	128	670	(100)	14,801
LCM inventory valuation adjustment (c)	(296)	—	(17)	—	(313)
Operating expenses (excluding depreciation and amortization expense reflected below)	989	23	105	—	1,117
Depreciation and amortization expense (d)	538	10	54	—	602
Total cost of sales	15,334	161	812	(100)	16,207
Other operating expenses	24	—	1	—	25
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	186	186
Depreciation and amortization expense	—	—	—	12	12
Operating income (loss) by segment	\$ (629)	\$ 184	\$ 22	\$ (198)	(621)
Other income, net					48
Interest and debt expense, net of capitalized interest					(143)
Loss before income tax benefit					(716)
Income tax benefit					(337)
Net loss					(379)
Less: Net income attributable to noncontrolling interests (b)					85
Net loss attributable to Valero Energy Corporation stockholders					\$ (464)

See note references on pages 58 through 63.

**Third Quarter Results -
Financial Highlights By Segment and Total Company (continued)**
(millions of dollars)

	Three Months Ended September 30, 2019				
	Refining	Renewable Diesel	Ethanol	Corporate and Eliminations	Total
Revenues:					
Revenues from external customers	\$ 26,145	\$ 212	\$ 891	\$ 1	\$ 27,249
Intersegment revenues	2	50	57	(109)	—
Total revenues	26,147	262	948	(108)	27,249
Cost of sales:					
Cost of materials and other	23,432	164	847	(108)	24,335
Operating expenses (excluding depreciation and amortization expense reflected below)	1,100	18	121	—	1,239
Depreciation and amortization expense	518	15	23	—	556
Total cost of sales	25,050	197	991	(108)	26,130
Other operating expenses	10	—	—	—	10
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	217	217
Depreciation and amortization expense	—	—	—	11	11
Operating income (loss) by segment	\$ 1,087	\$ 65	\$ (43)	\$ (228)	881
Other income, net					34
Interest and debt expense, net of capitalized interest					(111)
Income before income tax expense					804
Income tax expense					165
Net income					639
Less: Net income attributable to noncontrolling interests					30
Net income attributable to Valero Energy Corporation stockholders					\$ 609

See note references on pages 58 through 63.

**Third Quarter Results -
Average Market Reference Prices and Differentials**

	Three Months Ended September 30,		
	2020	2019	Change
Refining			
Feedstocks (dollars per barrel)			
Brent crude oil	\$ 43.38	\$ 62.08	\$ (18.70)
Brent less West Texas Intermediate (WTI) crude oil	2.47	5.64	(3.17)
Brent less Alaska North Slope (ANS) crude oil	0.64	(0.99)	1.63
Brent less Louisiana Light Sweet (LLS) crude oil	0.88	1.46	(0.58)
Brent less Argus Sour Crude Index (ASCI) crude oil	1.71	3.18	(1.47)
Brent less Maya crude oil	4.19	5.45	(1.26)
LLS crude oil	42.50	60.62	(18.12)
LLS less ASCI crude oil	0.83	1.72	(0.89)
LLS less Maya crude oil	3.31	3.99	(0.68)
WTI crude oil	40.91	56.44	(15.53)
Natural gas (dollars per million British Thermal Units (MMBtu))			
	1.99	2.28	(0.29)
Product margins (dollars per barrel)			
U.S. Gulf Coast:			
Conventional Blendstock of Oxygenate Blending (CBOB) gasoline less Brent	4.96	6.82	(1.86)
Ultra-low-sulfur (ULS) diesel less Brent	5.19	15.79	(10.60)
Propylene less Brent	(12.69)	(19.36)	6.67
CBOB gasoline less LLS	5.84	8.28	(2.44)
ULS diesel less LLS	6.07	17.25	(11.18)
Propylene less LLS	(11.81)	(17.90)	6.09
U.S. Mid-Continent:			
CBOB gasoline less WTI	8.17	15.28	(7.11)
ULS diesel less WTI	8.54	21.38	(12.84)
North Atlantic:			
CBOB gasoline less Brent	8.08	10.11	(2.03)
ULS diesel less Brent	6.79	17.28	(10.49)
U.S. West Coast:			
California Reformulated Gasoline Blendstock of Oxygenate Blending (CARBOB) 87 gasoline less ANS	13.19	19.31	(6.12)
California Air Resources Board (CARB) diesel less ANS	9.34	18.38	(9.04)
CARBOB 87 gasoline less WTI	15.02	25.94	(10.92)
CARB diesel less WTI	11.17	25.01	(13.84)

Third Quarter Results -
Average Market Reference Prices and Differentials, (continued)

	Three Months Ended September 30,		
	2020	2019	Change
Renewable diesel			
New York Mercantile Exchange ULS diesel (dollars per gallon)	\$ 1.20	\$ 1.90	\$ (0.70)
Biodiesel RIN (dollars per RIN)	0.67	0.46	0.21
California Low-Carbon Fuel Standard (dollars per metric ton)	195.60	198.24	(2.64)
Chicago Board of Trade (CBOT) soybean oil (dollars per pound)	0.32	0.29	0.03
Ethanol			
CBOT corn (dollars per bushel)	3.40	3.90	(0.50)
New York Harbor ethanol (dollars per gallon)	1.46	1.53	(0.07)

Total Company, Corporate, and Other

The following table includes selected financial data for the total company, corporate, and other for the third quarter of 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 47 and 48, unless otherwise noted.

	Three Months Ended September 30,		
	2020	2019	Change
Revenues	\$ 15,809	\$ 27,249	\$ (11,440)
Cost of sales (see notes (a) through (d) beginning on page 58)	16,207	26,130	(9,923)
General and administrative expenses (excluding depreciation and amortization expense)	186	217	(31)
Operating income (loss)	(621)	881	(1,502)
Adjusted operating income (loss) (see note (f) on page 60)	(553)	953	(1,506)
Interest and debt expense, net of capitalized interest	143	111	32
Income tax expense (benefit)	(337)	165	(502)
Net income attributable to noncontrolling interests	85	30	55

Revenues decreased by \$11.4 billion in the third quarter of 2020 compared to the third quarter of 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 \$9.9 billion and a \$31 million decrease in general and administrative expenses (excluding depreciation and amortization expense), which resulted in a \$1.5 billion decrease in operating income, from \$881 million of operating income in the third quarter of 2019 to an operating loss of \$621 million in the third quarter of 2020. The decrease in cost of sales was primarily due to decreases in crude oil and other feedstock costs.

Adjusted operating income also decreased by \$1.5 billion, from \$953 million of operating income in the third quarter of 2019 to an operating loss of \$553 million in the third quarter of 2020. The \$1.5 billion decrease includes a \$31 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 \$31 million in the third quarter of 2020 compared to the third quarter of 2019 primarily due to a \$21 million decrease in charitable contributions as well as a \$9 million decrease in certain employee compensation expenses.

“Interest and debt expense, net of capitalized interest” increased by \$32 million in the third quarter of 2020 compared to the third quarter of 2019 primarily due to interest expense associated with public debt offerings in April and September 2020 and finance leases that commenced in the latter part of 2019 and the first half of 2020. See Notes 5 and 6 in Condensed Notes to Consolidated Financial Statements for additional details.

Income tax expense decreased by \$502 million in the third quarter of 2020 compared to the third quarter of 2019 primarily as a result of lower income before income tax expense. Our effective tax rate was 47 percent for the third quarter of 2020 compared to 21 percent for the third quarter of 2019. The effective tax rate for the third quarter of 2020 was impacted by an expected U.S. federal tax NOL that will be carried back to 2015 when the U.S. federal statutory rate was 35 percent, as described in Note 10 of Condensed Notes to Consolidated Financial Statements. In addition, the higher effective tax rate for the third quarter of 2020 was also affected by the impact of nontaxable income that has the effect of increasing the effective tax rate in periods where we incur a loss before income taxes.

Net income attributable to noncontrolling interests increased by \$55 million in the third quarter of 2020 compared to the third quarter of 2019 primarily due to higher earnings associated with DGD.

Refining Segment Results

The following table includes selected financial and operating data of our refining segment for the third quarter of 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 47 and 48, respectively, unless otherwise noted.

	Three Months Ended September 30,		
	2020	2019	Change
Operating income (loss)	\$ (629)	\$ 1,087	\$ (1,716)
Adjusted operating income (loss) (see note (f) on page 60)	(575)	1,101	(1,676)
Refining margin (see note (f) on page 62)	\$ 952	\$ 2,719	\$ (1,767)
Operating expenses (excluding depreciation and amortization expense reflected below)	989	1,100	(111)
Depreciation and amortization expense	538	518	20
Throughput volumes (thousand barrels per day) (see note (g) on page 63)	2,526	2,954	(428)

Refining segment operating income decreased by \$1.7 billion in the third quarter of 2020 and refining segment adjusted operating income, which excludes the adjustments in the table in note (f) on page 60, also decreased by \$1.7 billion in the third quarter of 2020 compared to the third quarter of 2019. The

components of the decrease, along with the reasons for the changes in those components, are outlined below.

- Refining segment margin decreased by \$1.8 billion in the third quarter of 2020 compared to the third quarter of 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 49 reflects market reference prices and differentials that we believe had a material impact on the change in our refining segment margin in the third quarter of 2020 compared to the third quarter of 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 \$1.2 billion.
 - A decrease in gasoline margins had an unfavorable impact of approximately \$513 million.
 - A decrease in throughput volumes of 428,000 barrels per day had an unfavorable impact of approximately \$161 million. As noted in “OVERVIEW AND OUTLOOK—*Overview*—Business Operations Update” on pages 41 through 44, as a result of the economic disruption from COVID-19, 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 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 a partial recovery in demand for most of our products, we expect to continue to operate most of our refineries at reduced rates.
- Refining segment operating expenses (excluding depreciation and amortization expense) decreased by \$111 million primarily due to lower natural gas and electricity costs of \$50 million, lower chemical and catalyst costs of \$18 million, lower maintenance expenses of \$17 million, and a decrease in certain employee compensation expenses of \$13 million.
 - Refining segment depreciation and amortization expense associated with our cost of sales increased by \$20 million primarily due to an increase in depreciation expense associated with capital projects that were completed and finance leases that commenced in the latter part of 2019 and the first half of 2020.

Renewable Diesel Segment Results

The following table includes selected financial and operating data of our renewable diesel segment for the third quarter of 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 47 and 48, respectively, unless otherwise noted.

	Three Months Ended September 30,		
	2020	2019	Change
Operating income	\$ 184	\$ 65	\$ 119
Adjusted operating income (see note (f) on page 61)	184	123	61
Renewable diesel margin (see note (f) on page 62)	\$ 217	\$ 156	\$ 61
Operating expenses (excluding depreciation and amortization expense reflected below)	23	18	5
Depreciation and amortization expense	10	15	(5)
Sales volumes (thousand gallons per day) (see note (g) on page 63)	870	638	232

Renewable diesel segment operating income increased by \$119 million in the third quarter of 2020; however, renewable diesel segment adjusted operating income, which excludes the adjustment in the table in note (f) on page 61, increased by \$61 million in the third quarter of 2020 compared to the third quarter of 2019. The increase was due to higher renewable diesel segment margin.

Renewable diesel segment margin increased by \$61 million in the third quarter of 2020 compared to the third quarter of 2019. The increase in renewable diesel segment margin is primarily due to an increase in sales volumes of 232,000 gallons per day, which had a favorable impact of approximately \$55 million.

Ethanol Segment Results

The following table includes selected financial and operating data of our ethanol segment for the third quarter of 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 47 and 48, respectively, unless otherwise noted.

	Three Months Ended September 30,		
	2020	2019	Change
Operating income (loss)	\$ 22	\$ (43)	\$ 65
Adjusted operating income (loss) (see note (f) on page 61)	36	(43)	79
Ethanol margin (see note (f) on page 63)	\$ 165	\$ 101	\$ 64
Operating expenses (excluding depreciation and amortization expense reflected below)	105	121	(16)
Depreciation and amortization expenses (see note (d) on page 59)	54	23	31
Production volumes (thousand gallons per day) (see note (g) on page 63)	3,800	4,006	(206)

Ethanol segment operating income increased by \$65 million in the third quarter of 2020; however, ethanol segment adjusted operating income, which excludes the adjustments in the table in note (f) on page 61, increased by \$79 million in the third quarter of 2020 compared to the third quarter of 2019. The components of the increase, along with the reasons for the changes in those components, are outlined below.

- Ethanol segment margin increased by \$64 million in the third quarter of 2020 compared to the third quarter of 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 50 reflects market reference prices that we believe had a material impact on the change in our ethanol segment margin in the third quarter of 2020 compared to the third quarter of 2019.

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

- Lower corn prices had a favorable impact of approximately \$92 million.
 - Lower ethanol prices had an unfavorable impact of approximately \$23 million.
 - A decrease in production volumes of 206,000 gallons per day had an unfavorable impact of approximately \$12 million. As noted in “OVERVIEW AND OUTLOOK—*Overview*—Business Operations Update” on pages 41 through 44, as a result of the economic disruption from COVID-19, eight of our ethanol plants were temporarily idled and production was reduced at our remaining six ethanol plants during the early months of the pandemic. However, demand for ethanol began to recover during the latter part of the second quarter of 2020 and, as a result, 11 of our 14 ethanol plants have recently returned to full production, including five of the plants that had been temporarily idled.
- Ethanol segment operating expenses (excluding depreciation and amortization expense) decreased by \$16 million primarily due to lower natural gas and electricity costs of \$6 million, lower chemical and catalyst costs of \$5 million, and lower maintenance expenses of \$3 million.

**First Nine Months Results -
Financial Highlights By Segment and Total Company
(millions of dollars)**

	Nine Months Ended September 30, 2020				
	Refining	Renewable Diesel	Ethanol	Corporate and Eliminations	Total
Revenues:					
Revenues from external customers	\$ 45,327	\$ 850	\$ 2,131	\$ —	\$ 48,308
Intersegment revenues	6	150	160	(316)	—
Total revenues	45,333	1,000	2,291	(316)	48,308
Cost of sales:					
Cost of materials and other (a) (b)	41,769	393	1,984	(314)	43,832
LCM inventory valuation adjustment (c)	(19)	—	—	—	(19)
Operating expenses (excluding depreciation and amortization expense reflected below)	2,912	63	293	—	3,268
Depreciation and amortization expense (d)	1,607	33	97	—	1,737
Total cost of sales	46,269	489	2,374	(314)	48,818
Other operating expenses	29	—	1	—	30
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	532	532
Depreciation and amortization expense	—	—	—	37	37
Operating income (loss) by segment	\$ (965)	\$ 511	\$ (84)	\$ (571)	(1,109)
Other income, net					107
Interest and debt expense, net of capitalized interest					(410)
Loss before income tax benefit					(1,412)
Income tax benefit					(614)
Net loss					(798)
Less: Net income attributable to noncontrolling interests (b)					264
Net loss attributable to Valero Energy Corporation stockholders					\$ (1,062)

See note references on pages 58 through 63.

**First Nine Months Results -
Financial Highlights By Segment and Total Company (continued)**
(millions of dollars)

	Nine Months Ended September 30, 2019				
	Refining	Renewable Diesel	Ethanol	Corporate and Eliminations	Total
Revenues:					
Revenues from external customers	\$ 77,109	\$ 686	\$ 2,648	\$ 2	\$ 80,445
Intersegment revenues	12	174	162	(348)	—
Total revenues	77,121	860	2,810	(346)	80,445
Cost of sales:					
Cost of materials and other	69,769	577	2,396	(346)	72,396
Operating expenses (excluding depreciation and amortization expense reflected below)	3,197	54	378	—	3,629
Depreciation and amortization expense	1,539	38	68	—	1,645
Total cost of sales	74,505	669	2,842	(346)	77,670
Other operating expenses	13	—	1	—	14
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	625	625
Depreciation and amortization expense	—	—	—	39	39
Operating income (loss) by segment	\$ 2,603	\$ 191	\$ (33)	\$ (664)	2,097
Other income, net (e)					68
Interest and debt expense, net of capitalized interest					(335)
Income before income tax expense					1,830
Income tax expense					376
Net income					1,454
Less: Net income attributable to noncontrolling interests					92
Net income attributable to Valero Energy Corporation stockholders					\$ 1,362

See note references on pages 58 through 63.

**First Nine Months Results -
Average Market Reference Prices and Differentials**

	Nine Months Ended September 30,		
	2020	2019	Change
Refining			
Feedstocks (dollars per barrel)			
Brent crude oil	\$ 42.50	\$ 64.74	\$ (22.24)
Brent less WTI crude oil	4.27	7.70	(3.43)
Brent less ANS crude oil	1.00	(0.51)	1.51
Brent less LLS crude oil	2.20	1.40	0.80
Brent less ASCI crude oil	3.62	3.17	0.45
Brent less Maya crude oil	7.66	5.57	2.09
LLS crude oil	40.30	63.34	(23.04)
LLS less ASCI crude oil	1.42	1.77	(0.35)
LLS less Maya crude oil	5.46	4.17	1.29
WTI crude oil	38.23	57.04	(18.81)
Natural gas (dollars per MMBtu)			
	1.82	2.53	(0.71)
Product margins (dollars per barrel)			
U.S. Gulf Coast:			
CBOB gasoline less Brent	2.61	4.57	(1.96)
ULS diesel less Brent	7.11	14.55	(7.44)
Propylene less Brent	(15.48)	(21.57)	6.09
CBOB gasoline less LLS	4.81	5.97	(1.16)
ULS diesel less LLS	9.31	15.95	(6.64)
Propylene less LLS	(13.28)	(20.17)	6.89
U.S. Mid-Continent:			
CBOB gasoline less WTI	7.35	14.58	(7.23)
ULS diesel less WTI	12.41	22.93	(10.52)
North Atlantic:			
CBOB gasoline less Brent	5.13	7.16	(2.03)
ULS diesel less Brent	9.34	16.49	(7.15)
U.S. West Coast:			
CARBOB 87 gasoline less ANS	10.15	16.76	(6.61)
CARB diesel less ANS	12.31	18.56	(6.25)
CARBOB 87 gasoline less WTI	13.42	24.97	(11.55)
CARB diesel less WTI	15.58	26.77	(11.19)

**First Nine Months Results -
Average Market Reference Prices and Differentials, (continued)**

	Nine Months Ended September 30,		
	2020	2019	Change
Renewable diesel			
New York Mercantile Exchange ULS diesel (dollars per gallon)	\$ 1.24	\$ 1.94	\$ (0.70)
Biodiesel RIN (dollars per RIN)	0.56	0.45	0.11
California Low-Carbon Fuel Standard (dollars per metric ton)	200.88	193.74	7.14
CBOT soybean oil (dollars per pound)	0.30	0.29	0.01
Ethanol			
CBOT corn (dollars per bushel)	3.46	3.85	(0.39)
NYH ethanol (dollars per gallon)	1.32	1.50	(0.18)

The following notes relate to references on pages 47 through 56 and 63 through 67.

- (a) Cost of materials and other for the three and nine months ended September 30, 2020 includes a charge of \$326 million for the impact of an expected liquidation of LIFO inventory layers attributable to our refining segment. Our inventory levels have decreased throughout the first nine months of 2020 due to lower production resulting from lower demand for our products caused by the negative economic impacts of COVID-19 on our business. Because these impacts are ongoing, we expect that substantially all of our LIFO inventory levels as of December 31, 2020 will remain below their December 31, 2019 levels.
- (b) Cost of materials and other for the three and nine months ended September 30, 2020 includes a benefit of \$82 million and \$237 million, respectively, related to the blender's tax credit attributable to renewable diesel volumes blended during those periods. The legislation authorizing the credit through December 31, 2022 was passed and signed into law in December 2019, and that legislation also applied retroactively to volumes blended during 2019 (2019 blender's tax credit). The entire 2019 blender's tax credit was recognized by us in December 2019 because the law was enacted in that month, but the benefit attributable to volumes blended during the three and nine months ended September 30, 2019 was \$62 million and \$211 million, respectively.

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

	Periods to which Blender's Tax Credit is Attributable			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Reportable segments to which blender's tax credit is attributable				
Refining	\$ 2	\$ 4	\$ 6	\$ 13
Renewable diesel	80	58	231	198
Total	<u>\$ 82</u>	<u>\$ 62</u>	<u>\$ 237</u>	<u>\$ 211</u>
Interests to which blender's tax credit is attributable				
Valero Energy Corporation stockholders	\$ 42	\$ 33	\$ 121	\$ 112
Noncontrolling interest	40	29	116	99
Total	<u>\$ 82</u>	<u>\$ 62</u>	<u>\$ 237</u>	<u>\$ 211</u>

- (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 reversal of \$2.2 billion in the three months ended June 30, 2020 and the remaining amount in the three months ended September 30, 2020. Of the \$313 million benefit recognized in the three months ended September 30, 2020, \$296 million and \$17 million is attributable to our refining and ethanol segments, respectively. The LCM inventory valuation adjustment for the nine months ended September 30, 2020 reflects a net benefit of \$19 million due to the foreign currency translation effect of the portion of the LCM inventory valuation adjustment attributable to our international operations.
- (d) Depreciation and amortization expense for the three and nine months ended September 30, 2020 includes \$30 million in accelerated depreciation related to a reduction in the estimated useful life of one of our ethanol plants.
- (e) "Other income, net" for the nine months ended September 30, 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 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 after adjusting for 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 measures are as follows:

- **Adjusted operating income (loss)** is defined as total company operating income (loss) adjusted to reflect the 2019 blender's tax credit in the proper period, and excluding 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. We believe adjusted operating income (loss) is an important measure of our operating and financial performance because it excludes items that are not indicative of our core operating performance.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Reconciliation of total company operating income (loss) to adjusted operating income (loss)				
Total company operating income (loss)	\$ (621)	\$ 881	\$ (1,109)	\$ 2,097
Adjustments:				
2019 blender's tax credit (see note (b))	—	62	—	211
LIFO liquidation adjustment (see note (a))	326	—	326	—
LCM inventory valuation adjustment (see note (c))	(313)	—	(19)	—
Change in estimated useful life (see note (d))	30	—	30	—
Other operating expenses	25	10	30	14
Adjusted operating income (loss)	<u>\$ (553)</u>	<u>\$ 953</u>	<u>\$ (742)</u>	<u>\$ 2,322</u>

- **Adjusted refining operating income (loss)** is defined as refining segment operating income (loss) adjusted to reflect the 2019 blender's tax credit in the proper period, and excluding the LIFO liquidation adjustment, the LCM inventory valuation adjustment, and other operating expenses, as reflected in the table below. We believe adjusted refining operating income (loss) is an important measure of our refining segment's operating and financial performance because it excludes items that are not indicative of that segment's core operating performance.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Reconciliation of refining operating income (loss) to adjusted refining operating income (loss)				
Refining operating income (loss)	\$ (629)	\$ 1,087	\$ (965)	\$ 2,603
Adjustments:				
2019 blender's tax credit (see note (b))	—	4	—	13
LIFO liquidation adjustment (see note (a))	326	—	326	—
LCM inventory valuation adjustment (see note (c))	(296)	—	(19)	—
Other operating expenses	24	10	29	13
Adjusted refining operating income (loss)	<u>\$ (575)</u>	<u>\$ 1,101</u>	<u>\$ (629)</u>	<u>\$ 2,629</u>

- **Adjusted renewable diesel operating income** is defined as renewable diesel segment operating income adjusted to reflect the 2019 blender's tax credit in the proper period, as reflected in the table below. We believe adjusted renewable diesel operating income is an important measure of our renewable diesel segment's operating and financial performance because it excludes items that are not indicative of that segment's core operating performance.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Reconciliation of renewable diesel operating income to adjusted renewable diesel operating income				
Renewable diesel operating income	\$ 184	\$ 65	\$ 511	\$ 191
Adjustment:				
2019 blender's tax credit (see note (b))	—	58	—	198
Adjusted renewable diesel operating income	<u>\$ 184</u>	<u>\$ 123</u>	<u>\$ 511</u>	<u>\$ 389</u>

- **Adjusted ethanol operating income (loss)** is defined as ethanol segment operating income (loss) excluding the LCM inventory valuation adjustment, the change in estimated useful life, and other operating expenses, as reflected in the table below. We believe adjusted ethanol operating income (loss) is an important measure of our ethanol segment's operating and financial performance because it excludes items that are not indicative of that segment's core operating performance.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Reconciliation of ethanol operating income (loss) to adjusted ethanol operating income (loss)				
Ethanol operating income (loss)	\$ 22	\$ (43)	\$ (84)	\$ (33)
Adjustments:				
LCM inventory valuation adjustment (see note (c))	(17)	—	—	—
Change in estimated useful life (see note (d))	30	—	30	—
Other operating expenses	1	—	1	1
Adjusted ethanol operating income (loss)	<u>\$ 36</u>	<u>\$ (43)</u>	<u>\$ (53)</u>	<u>\$ (32)</u>

- **Refining margin** is defined as refining operating income (loss) adjusted to reflect the 2019 blender's tax credit in the proper period, and excluding 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. We believe refining margin is an important measure of our refining segment's operating and financial performance as it is the most comparable measure to the industry's market reference product margins, which are used by industry analysts, investors, and others to evaluate our performance.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Reconciliation of refining operating income (loss) to refining margin				
Refining operating income (loss)	\$ (629)	\$ 1,087	\$ (965)	\$ 2,603
Adjustments:				
2019 blender's tax credit (see note (b))	—	4	—	13
LIFO liquidation adjustment (see note (a))	326	—	326	—
LCM inventory valuation adjustment (see note (c))	(296)	—	(19)	—
Operating expenses (excluding depreciation and amortization expense)	989	1,100	2,912	3,197
Depreciation and amortization expense	538	518	1,607	1,539
Other operating expenses	24	10	29	13
Refining margin	<u>\$ 952</u>	<u>\$ 2,719</u>	<u>\$ 3,890</u>	<u>\$ 7,365</u>

- **Renewable diesel margin** is defined as renewable diesel operating income adjusted to reflect the 2019 blender's tax credit in the proper period, and excluding operating expenses (excluding depreciation and amortization expense) and depreciation and amortization expense, as reflected in the table below. We believe renewable diesel margin is an important measure of our renewable diesel segment's operating and financial performance as it is the most comparable measure to the industry's market reference product margins, which are used by industry analysts, investors, and others to evaluate our performance.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Reconciliation of renewable diesel operating income to renewable diesel margin				
Renewable diesel operating income	\$ 184	\$ 65	\$ 511	\$ 191
Adjustments:				
2019 blender's tax credit (see note (b))	—	58	—	198
Operating expenses (excluding depreciation and amortization expense)	23	18	63	54
Depreciation and amortization expense	10	15	33	38
Renewable diesel margin	<u>\$ 217</u>	<u>\$ 156</u>	<u>\$ 607</u>	<u>\$ 481</u>

- **Ethanol margin** is defined as ethanol operating income (loss) excluding 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. We believe ethanol margin is an important measure of our ethanol segment's operating and financial performance as it is the most comparable measure to the industry's market reference product margins, which are used by industry analysts, investors, and others to evaluate our performance.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Reconciliation of ethanol operating income (loss) to ethanol margin				
Ethanol operating income (loss)	\$ 22	\$ (43)	\$ (84)	\$ (33)
Adjustments:				
LCM inventory valuation adjustment (see note (c))	(17)	—	—	—
Operating expenses (excluding depreciation and amortization expense)	105	121	293	378
Depreciation and amortization expense (see note (d))	54	23	97	68
Other operating expenses	1	—	1	1
Ethanol margin	<u>\$ 165</u>	<u>\$ 101</u>	<u>\$ 307</u>	<u>\$ 414</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.

Total Company, Corporate, and Other

The following table includes selected financial data for the total company, corporate, and other for the first nine months of 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 55 and 56, unless otherwise noted.

	Nine Months Ended September 30,		
	2020	2019	Change
Revenues	\$ 48,308	\$ 80,445	\$ (32,137)
Cost of sales (see notes (a) through (d) beginning on page 58)	48,818	77,670	(28,852)
General and administrative expenses (excluding depreciation and amortization expense)	532	625	(93)
LIFO liquidation adjustment (see note (a) on page 58)	326	—	326
Operating income (loss)	(1,109)	2,097	(3,206)
Adjusted operating income (loss) (see note (f) on page 60)	(742)	2,322	(3,064)
Interest and debt expense, net of capitalized interest	410	335	75
Income tax expense (benefit)	(614)	376	(990)
Net income attributable to noncontrolling interests	264	92	172

Revenues decreased by \$32.1 billion in the first nine months of 2020 compared to the first nine months of 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 \$28.9 billion and a decrease in general and administrative expenses (excluding depreciation and amortization expense) of \$93 million, which resulted in a \$3.2 billion decrease in operating income, from

\$2.1 billion of operating income in the first nine months of 2019 to an operating loss of \$1.1 billion in the first nine months of 2020. The decrease in cost of sales was primarily due to decreases in crude oil and other feedstock costs, partially offset by the \$326 million LIFO liquidation adjustment.

Adjusted operating income decreased by \$3.1 billion, from \$2.3 billion of operating income in the first nine months of 2019 to an operating loss of \$742 million in the first nine months of 2020. The \$3.1 billion decrease includes a \$93 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 \$93 million in the first nine months of 2020 compared to the first nine months of 2019 primarily due to a decrease in charitable contributions of \$22 million, lower taxes other than income taxes of \$17 million, lower advertising expenses of \$15 million, and a decrease in certain employee compensation expenses of \$11 million, as well as the effect of environmental reserve adjustments related to certain non-operating sites of \$11 million and transaction costs of \$7 million associated with the Merger Transaction with VLP incurred in 2019.

“Interest and debt expense, net of capitalized interest” increased by \$75 million in the first nine months of 2020 compared to the first nine months of 2019 primarily due to interest expense associated with public debt offerings in the first nine months of 2020 and finance leases that commenced in the latter part of 2019 and the first half of 2020. See Notes 5 and 6 in Condensed Notes to Consolidated Financial Statements for additional details.

Income tax expense decreased by \$990 million in the first nine months of 2020 compared to the first nine months of 2019 primarily as a result of lower income before income tax expense. Our effective tax rate was 43 percent for the first nine months of 2020 compared to 21 percent for the first nine months of 2019. The effective tax rate for the first nine months of 2020 was impacted by an expected U.S. federal tax NOL that will be carried back to 2015 when the U.S. federal statutory rate was 35 percent, as described in Note 10 of Condensed Notes to Consolidated Financial Statements. In addition, the higher effective tax rate for the first nine months of 2020 was also affected by the impact of nontaxable income that has the effect of increasing the effective tax rate in periods where we incur a loss before income taxes.

Net income attributable to noncontrolling interests increased by \$172 million in the first nine months of 2020 compared to the first nine months of 2019 primarily due to higher earnings associated with DGD.

Refining Segment Results

The following table includes selected financial and operating data of our refining segment for the first nine months of 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 55 and 56, respectively, unless otherwise noted.

	Nine Months Ended September 30,		
	2020	2019	Change
Operating income (loss)	\$ (965)	\$ 2,603	\$ (3,568)
Adjusted operating income (loss) (see note (f) on page 60)	(629)	2,629	(3,258)
Refining margin (see note (f) on page 62)	\$ 3,890	\$ 7,365	\$ (3,475)
Operating expenses (excluding depreciation and amortization expense reflected below)	2,912	3,197	(285)
Depreciation and amortization expense	1,607	1,539	68
Throughput volumes (thousand barrels per day) (see note (g) on page 63)	2,557	2,929	(372)

Refining segment operating income decreased by \$3.6 billion in the first nine months of 2020; however, refining segment adjusted operating income, which excludes the adjustments in the table in note (f) on page 60, decreased by \$3.3 billion in the first nine months of 2020 compared to the first nine months of 2019. The components of this decrease, along with the reasons for the changes in those components, are outlined below.

- Refining segment margin decreased by \$3.5 billion in the first nine months of 2020 compared to the first nine months of 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 57 reflects market reference prices and differentials that we believe had a material impact on the change in our refining segment margin in the first nine months of 2020 compared to the first nine months of 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 \$2.3 billion.
- A decrease in gasoline margins had an unfavorable impact of approximately \$1.2 billion.
- A decrease in throughput volumes of 372,000 barrels per day had an unfavorable impact of \$566 million. As noted in “OVERVIEW AND OUTLOOK—Overview—Business Operations Update” on pages 41 through 44, as a result of the economic disruption from COVID-19, 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 a partial recovery in demand for most of our products, we expect to continue to operate most of our refineries at reduced rates.

- Higher margins on other products had a favorable impact of approximately \$718 million.
- Refining segment operating expenses (excluding depreciation and amortization expense) decreased by \$285 million primarily due to lower natural gas and electricity costs of \$163 million, lower chemical and catalyst costs of \$56 million, and lower maintenance expenses of \$36 million.
- Refining segment depreciation and amortization expense associated with our cost of sales increased by \$68 million primarily due to an increase in depreciation expense associated with capital projects that were completed and finance leases that commenced in the latter part of 2019 and the first half of 2020.

Renewable Diesel Segment Results

The following table includes selected financial and operating data of our renewable diesel segment for the first nine months of 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 55 and 56, respectively, unless otherwise noted.

	Nine Months Ended September 30,		
	2020	2019	Change
Operating income	\$ 511	\$ 191	\$ 320
Adjusted operating income (see note (f) on page 61)	511	389	122
Renewable diesel margin (see note (f) on page 62)	\$ 607	\$ 481	\$ 126
Operating expenses (excluding depreciation and amortization expense reflected below)	63	54	9
Depreciation and amortization expense	33	38	(5)
Sales volumes (thousand gallons per day) (see note (g) on page 63)	844	732	112

Renewable diesel segment operating income increased by \$320 million in the first nine months of 2020; however, renewable diesel segment adjusted operating income, which excludes the adjustment in the table in note (f) on page 61, increased by \$122 million in the first nine months of 2020 compared to the first nine months of 2019. The increase was primarily due to higher renewable diesel segment margin.

Renewable diesel segment margin increased by \$126 million in the first nine months of 2020 compared to the first nine months of 2019. Renewable diesel segment margin is primarily affected by the price of the renewable diesel that we sell and the cost of the feedstocks that we process. The table on page 58 reflects market reference prices that we believe had a material impact on the change in our renewable diesel segment margin in the first nine months of 2020 compared to the first nine months of 2019.

The increase in renewable diesel segment margin was primarily due to the following:

- An increase in sales volumes of 112,000 gallons per day had a favorable impact of \$79 million.

- Price risk management activities had a favorable impact of \$62 million. We recognized a hedge gain of \$42 million in the first nine months of 2020 compared to a hedge loss of \$20 million in the first nine months of 2019.
- Lower product prices had an unfavorable impact of approximately \$20 million.

Ethanol Segment Results

The following table includes selected financial and operating data of our ethanol segment for the first nine months of 2020 and 2019. The selected financial data is derived from the Financial Highlights by Segment and Total Company tables on pages 55 and 56, respectively, unless otherwise noted.

	Nine Months Ended September 30,		
	2020	2019	Change
Operating loss	\$ (84)	\$ (33)	\$ (51)
Adjusted operating loss (see note (f) on page 61)	(53)	(32)	(21)
Ethanol margin (see note (f) on page 63)	\$ 307	\$ 414	\$ (107)
Operating expenses (excluding depreciation and amortization expense reflected below)	293	378	(85)
Depreciation and amortization expense (see note (d) on page 59)	97	68	29
Production volumes (thousand gallons per day) (see note (g) on page 63)	3,408	4,251	(843)

Ethanol segment operating income decreased by \$51 million in the first nine months of 2020; however, ethanol segment adjusted operating income, which excludes the adjustment in the table in note (f) on page 61, decreased by \$21 million in the first nine months of 2020 compared to the first nine months of 2019. The components of this decrease, along with the reasons for the changes in those components, are outlined below.

- Ethanol segment margin decreased by \$107 million in the first nine months of 2020 compared to the first nine months of 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 58 reflects market reference prices that we believe had a material impact on the change in our ethanol segment margin in the first nine months of 2020 compared to the first nine months of 2019.

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

- Lower ethanol prices had an unfavorable impact of approximately \$154 million.
- A decrease in production volumes of 843,000 gallons per day had an unfavorable impact of approximately \$80 million. As noted in “OVERVIEW AND OUTLOOK—Overview—Business Operations Update” on pages 41 through 44, as a result of the economic disruption from COVID-19, eight of our ethanol plants were temporarily idled and production was reduced at our remaining six ethanol plants during the early months of the

pandemic. However, demand for ethanol began to recover during the latter part of the second quarter of 2020 and, as a result, 11 of our 14 ethanol plants have recently returned to full production, including five of the plants that had been temporarily idled.

- Lower corn prices had a favorable impact of approximately \$106 million.
- Higher prices on the co-products that we produce, primarily distillers grains, had a favorable impact of approximately \$23 million.
- Ethanol segment operating expenses (excluding depreciation and amortization expense) decreased by \$85 million primarily due to lower natural gas and electricity costs of \$43 million, lower chemicals and catalyst costs of \$21 million, and lower maintenance expenses of \$10 million.

LIQUIDITY AND CAPITAL RESOURCES

Overview

During the nine months ended September 30, 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.” Even though we generated \$852 million of cash from operating activities during the first nine months of 2020, the amount of cash generated was negatively impacted by lower earnings and a use of \$232 million of cash to fund working capital, which resulted from the rapid decline in the market prices of refined petroleum products and crude oil that occurred during March and April 2020.

We have taken a number of actions to address the current 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 6 of Condensed Notes to Consolidated Financial Statements. We have taken other actions to address our liquidity and those actions are described in “OVERVIEW AND OUTLOOK—*Overview*—Business Operations Update” on pages 41 through 44 and in the discussion of matters impacting our liquidity and capital resources below.

Our Liquidity

Our liquidity consisted of the following as of September 30, 2020 (in millions):

Available borrowing capacity from committed facilities:	
Valero Revolver	\$ 3,966
364-day Revolving Credit Facility	875
Canadian Revolver ^(a)	109
Accounts receivable sales facility	817
Letter of credit facility	50
Total available borrowing capacity	5,817
Cash and cash equivalents ^(b)	3,809
Total liquidity	\$ 9,626

(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 6 of Condensed Notes to Consolidated Financial Statements, the availability under our Canadian Revolver as of September 30, 2020 in Canadian dollars was C\$145 million.

(b) Excludes \$238 million of cash and cash equivalents related to our 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 6 of Condensed Notes to Consolidated Financial Statements.

In July 2020, 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 6 of Condensed Notes to Consolidated Financial Statements. As of September 30, 2020 and October 27, 2020, we had no outstanding borrowings under this facility, and the available borrowing capacity was \$742 million as of October 27, 2020.

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):

	Nine Months Ended September 30,	
	2020	2019
Cash flows provided by (used in):		
Operating activities	\$ 852	\$ 3,823
Investing activities	(1,852)	(2,190)
Financing activities:		
Borrowings	4,522	2,040
Other financing activities	(2,052)	(4,514)
Financing activities	2,470	(2,474)
Effect of foreign exchange rate changes on cash	(6)	(4)
Net increase (decrease) in cash and cash equivalents	\$ 1,464	\$ (845)

Cash Flows for the Nine Months Ended September 30, 2020

In the first nine months of 2020, we used \$852 million of cash generated by our operations and \$4.5 billion in borrowings to make \$1.9 billion of investments in our business, fund \$2.1 billion of other financing activities, and increase our available cash on hand by \$1.4 billion. The borrowings are described in Note 6 of Condensed Notes to Consolidated Financial Statements.

As previously noted, our operations generated \$852 million of cash in the first nine months of 2020, which was negatively impacted by an unfavorable change in working capital of \$232 million. The change in working capital was affected primarily by a \$1.3 billion use of cash⁶ resulting from the rapid decline in market prices of refined petroleum products and crude oil as a result of the negative economic effects of COVID-19 that impacted our receivables and accounts payable. This use of cash, along with other uses of cash, were partially offset by a \$1.6 billion source of cash driven by a reduction in inventory levels on hand. We expect that substantially all of our inventory levels as of December 31, 2020 will remain below their December 31, 2019 levels. Details regarding the components of the change in working capital, along with the reasons for the changes in those components, are described in Note 13 of Condensed Notes to Consolidated Financial Statements. In addition, see “RESULTS OF OPERATIONS” for an analysis of our net loss.

Our investing activities of \$1.9 billion consisted of \$1.9 billion in total capital investments, as defined below, of which \$329 million related to self-funded capital investments by DGD, and \$196 million was related to capital expenditures of VIEs other than DGD.

Other financing activities of \$2.1 billion consisted primarily of \$1.2 billion in dividends, \$461 million of payments of debt and finance lease obligations, \$208 million to pay distributions to noncontrolling interests, and \$147 million for the purchase of common stock for treasury.

Cash Flows for the Nine Months Ended September 30, 2019

In the first nine months of 2019, we used \$845 million of cash on hand, \$3.8 billion of cash generated by our operations, and \$2.0 billion in borrowings to make \$2.2 billion of investments in our business and

⁶ Represents the net cash flow change in “receivables, net” of \$3.6 billion and accounts payable of \$4.9 billion during the nine months ended September 30, 2020, as described in Note 13 of Condensed Notes to Consolidated Financial Statements.

fund \$4.5 billion of other financing activities. The borrowings are described in Note 6 of Condensed Notes to Consolidated Financial Statements.

As previously noted, our operations generated \$3.8 billion of cash in the first nine months of 2019, which was favorably impacted by a positive change in working capital of \$728 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 13 of Condensed Notes to Consolidated Financial Statements. In addition, see “RESULTS OF OPERATIONS” for an analysis of our net income.

Our investing activities of \$2.2 billion consisted primarily of \$2.1 billion in total capital investments, as defined below, of which \$107 million is related to self-funded capital investments by DGD, and \$139 million was related to capital expenditures of VIEs other than DGD.

Other financing activities of \$4.5 billion consisted primarily of \$1.8 billion of payments of debt and finance lease obligations, \$1.1 billion in dividends, \$950 million to acquire all of the outstanding publicly held common units of VLP, and \$555 million for the purchase of common stock for treasury.

Capital Investments

Our total capital investments include the following:

- Capital expenditures;
- Deferred turnaround and catalyst cost expenditures; and
- Investments in unconsolidated joint ventures.

Capital investments attributable to Valero is a non-GAAP financial measure that reflects our net share of total capital investments. It 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 total 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.

This non-GAAP measure should not be considered as an alternative to 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.

	Nine Months Ended September 30,	
	2020	2019
Reconciliation of total capital investments to capital investments attributable to Valero		
Capital expenditures (excluding VIEs)	\$ 775	\$ 1,179
Capital expenditures of VIEs:		
DGD	311	91
Other VIEs	196	139
Deferred turnaround and catalyst cost expenditures (excluding VIEs)	529	583
Deferred turnaround and catalyst cost expenditures of DGD	18	16
Investments in unconsolidated joint ventures	39	122
Total capital investments	1,868	2,130
Adjustments:		
DGD's capital investments attributable to our joint venture partner	(165)	(54)
Capital expenditures of other VIEs	(196)	(139)
Capital investments attributable to Valero	\$ 1,507	\$ 1,937

Due to the current negative economic environment, we have deferred certain capital investments for 2020 related to our refining and ethanol segments. The deferral does not impact our intent to satisfy all required safety, environmental, and regulatory capital commitments. We now expect to incur approximately \$2.0 billion in capital investments attributable to Valero during 2020 and will continue to evaluate these investments as changes to the current economic environment occur.

Other Matters Impacting Liquidity and Capital Resources

Stock Purchase Program

As of September 30, 2020, we had \$1.4 billion available for purchase under our stock purchase program, which has no expiration date. 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 this program.

Pension Plan Funding

We expect to make a discretionary contribution of \$86 million to our qualified U.S. pension plan in December 2020.

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 operating facilities could require material additional expenditures to comply with environmental laws and regulations.

Tax Matters

Under recently passed legislation, such as the CARES Act in the U.S., and 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. Approximately 40 percent of the deferred payments were paid in the third quarter of 2020, with the remaining amount due in 2021 and 2022. Of the remaining amount due, approximately 70 percent will be paid in 2021 and 30 percent in 2022.

Cash Held by Our International Subsidiaries

As of September 30, 2020, \$1.8 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 as a result of the deemed repatriation provisions of the Tax Cuts and Jobs Act of 2017, 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 COVID-19 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.

CONTRACTUAL OBLIGATIONS

As of September 30, 2020, our contractual obligations included debt, finance lease obligations, operating lease obligations, purchase obligations, and other long-term liabilities. In the ordinary course of business, we had lease and debt-related activities during the nine months ended September 30, 2020 as described in Notes 5 and 6, respectively, of Condensed Notes to Consolidated Financial Statements. In addition, certain of our purchase obligations, primarily related to crude oil and other feedstock supply arrangements, declined during the first nine months of 2020 as a result of the decrease in crude oil and feedstock prices that occurred during the period because of the current economic conditions. There were no material changes outside the ordinary course of business with respect to our contractual obligations during the nine months ended September 30, 2020.

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 September 30, 2020, all of our ratings on our senior unsecured debt, including debt of one of our wholly owned subsidiaries that is 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.

CRITICAL ACCOUNTING 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 our financial statements and accompanying notes. Actual results could differ from those estimates. Our critical accounting estimates are included in our annual report on Form 10-K for the year ended December 31, 2019. As of September 30, 2020, the following accounting policy is included as it involves 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. Estimates of the sensitivity to earnings that would result from changes in the assumptions used in determining our estimates are not practicable due to the number of assumptions and contingencies involved, and the wide range of possible outcomes.

Impairment of Long-Lived Assets and Goodwill

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.

Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate the asset might be impaired. An impairment loss is recognized if the carrying amount of the asset exceeds its fair value.

As of September 30, 2020, we determined there was no impairment of our long-lived assets or goodwill as discussed in Note 2 of Condensed Notes to Consolidated Financial Statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

COMMODITY PRICE RISK

We are exposed to market risks related to the volatility in the price of crude oil, refined petroleum products (primarily gasoline and distillate), renewable diesel, grain (primarily corn), renewable diesel feedstocks, 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 feedstock and refined petroleum product purchases, refined petroleum product sales, renewable diesel sales, or natural gas purchases to lock in the price of those forecasted transactions 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.

The following sensitivity analysis includes all of our derivative instruments entered into for purposes other than trading with which we have market risk (in millions):

	September 30, 2020	December 31, 2019
Gain (loss) in fair value resulting from:		
10% increase in underlying commodity prices	\$ (1)	\$ (39)
10% decrease in underlying commodity prices	1	38

See Note 15 of Condensed Notes to Consolidated Financial Statements for notional volumes associated with these derivative contracts as of September 30, 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. Some of these contracts are derivative instruments; however, we elect the normal purchase exception and do not record these contracts at their fair values. As of September 30, 2020 and December 31, 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 15 of Condensed 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 6 of Condensed Notes to Consolidated Financial Statements for additional information related to our debt.

September 30, 2020								
Expected Maturity Dates								
	Remainder of 2020 (a)	2021	2022	2023 (b)	2024	There- after	Total (c)	Fair Value
Fixed rate	\$ —	\$ —	\$ —	\$ 850	\$ 925	\$ 10,124	\$ 11,899	\$ 13,517
Average interest rate	— %	— %	— %	2.7 %	1.2 %	4.8 %	4.4 %	
Floating rate (d)	\$ 551	\$ 5	\$ 6	\$ 594	\$ —	\$ —	\$ 1,156	\$ 1,156
Average interest rate	4.0 %	3.0 %	3.0 %	1.5 %	— %	— %	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	— %	5.0 %	— %	— %	— %	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 September 30, 2020 and December 31, 2019, our floating rate debt includes \$550 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 September 30, 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 September 30, 2020 and December 31, 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

The following table provides information about our foreign currency contracts (dollars in millions) that, as of the dates set forth below, mature in 2020, the fair values of which are sensitive to changes in foreign currency exchange rates. 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	Receive GBP/ Pay USD
September 30, 2020				
Contract amount	\$ 176	\$ 68	\$ 1,900	\$ 150
Weighted-average contractual exchange rate	0.75336	1.28142	0.74714	1.31056
Fair value	\$ 1	\$ (1)	\$ 8	\$ (2)
December 31, 2019				
Contract amount	\$ 406	\$ 333	\$ 2,250	\$ —
Weighted-average contractual exchange rate	0.75911	1.31201	0.76217	—
Fair value	\$ (6)	\$ (4)	\$ 27	\$ —

See Note 15 of Condensed Notes to Consolidated Financial Statements for a discussion about our foreign currency risk management activities.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of 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 September 30, 2020.

(b) 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.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

The information below describes new proceedings or material developments in proceedings that we previously reported in our annual report on Form 10-K for the year ended December 31, 2019 and our quarterly reports on Form 10-Q for the quarterly periods ended March 31, 2020, and June 30, 2020.

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 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 will result in monetary sanctions of \$100,000 or more.

Attorney General of the State of Texas (Texas AG) (Houston Terminal). In our annual report on Form 10-K for the year ended December 31, 2019, we reported that we had an outstanding Notice of Enforcement (NOE) from the Texas Commission on Environmental Quality (TCEQ), and an outstanding Violation Notice from the Harris County Pollution Control Services Department, both alleging excess emissions from Tank 003 that occurred during Hurricane Harvey at our Houston Terminal. On January 27, 2020, the Texas AG filed suit related to this incident against our Houston Terminal in the 419th Judicial District Court of Travis County, Texas, Cause No. D-1-GN-20-000516. On September 30, 2020, we resolved this matter with the Texas AG for civil penalties in an amount not material to Valero.

U.S. EPA (Fuels). In our annual report on Form 10-K for the year ended December 31, 2019, we reported that we had an outstanding Notice of Violation and draft Consent Order from the U.S. EPA related to violations from a 2015 Mobile Source Inspection. On October 19, 2020, we resolved this matter with the EPA for injunctive relief and civil penalties in an amount not material to Valero.

TCEQ (Corpus Christi West Refinery). In our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, we reported that we had received an NOE from the TCEQ related to a Title V deviation report investigation at our Corpus Christi West Refinery. On September 25, 2020, the TCEQ withdrew this NOE and is not proceeding with formal enforcement.

TCEQ (Three Rivers Refinery). On August 31, 2020, we received an NOE from the TCEQ related to a Resource Conservation and Recovery Act (RCRA) inspection at our Three Rivers Refinery, which we believe could result in penalties in excess of \$100,000. We are working with the TCEQ to resolve this matter.

ITEM 1A. RISK FACTORS

There have been no changes from the risk factors disclosed in our annual report on Form 10-K for the year December 31, 2019, as supplemented by the risk factor included in our current report on Form 8-K filed with the SEC on April 13, 2020. However, to the extent COVID-19 adversely affects our business, financial condition, results of operation, and liquidity, it may also have the effect of heightening many of the other risks described in such risk factors.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(a) *Unregistered Sales of Equity Securities.* Not applicable.

(b) *Use of Proceeds.* Not applicable.

(c) *Issuer Purchases of Equity Securities.* The following table discloses purchases of shares of our common stock made by us or on our behalf during the third 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)
July 2020	2,254	\$ 56.80	2,254	—	\$1.4 billion
August 2020	637	\$ 52.64	637	—	\$1.4 billion
September 2020	2,203	\$ 48.20	2,203	—	\$1.4 billion
Total	5,094	\$ 52.56	5,094	—	\$1.4 billion

- (a) The shares reported in this column represent purchases settled in the third 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 (2018 Program), with no expiration date. As of September 30, 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.

ITEM 6. EXHIBITS

Exhibit No.	Description
<u>*31.01</u>	<u>Rule 13a-14(a) Certification (under Section 302 of the Sarbanes-Oxley Act of 2002) of principal executive officer.</u>
<u>*31.02</u>	<u>Rule 13a-14(a) Certification (under Section 302 of the Sarbanes-Oxley Act of 2002) of principal financial officer.</u>
<u>**32.01</u>	<u>Section 1350 Certifications (under Section 906 of the Sarbanes-Oxley Act of 2002).</u>
***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.

Certain agreements relating to our long-term debt have not been filed as exhibits as permitted by paragraph (b)(4)(iii)(A) of Item 601 of Regulation S-K since the total amount of securities authorized under any such agreements do not exceed 10 percent of our total consolidated assets. Upon request, we will furnish to the SEC all constituent agreements defining the rights of holders of our long-term debt not filed herewith.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

VALERO ENERGY CORPORATION
(Registrant)

By:

/s/ Jason W. Fraser

Jason W. Fraser
Executive Vice President and
Chief Financial Officer
(Duly Authorized Officer and Principal
Financial and Accounting Officer)

Date: October 28, 2020

**CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Joseph W. Gorder, certify that:

1. I have reviewed this quarterly report on Form 10-Q 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: October 28, 2020

/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 quarterly report on Form 10-Q 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: October 28, 2020

/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 Quarterly Report of Valero Energy Corporation (the Company) on Form 10-Q for the quarter ended September 30, 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
October 28, 2020

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 Quarterly Report of Valero Energy Corporation (the Company) on Form 10-Q for the quarter ended September 30, 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

October 28, 2020

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.