
**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 June 30, 2018

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 1-13175

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)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 July 31, 2018 was 427,398,027 .

VALERO ENERGY CORPORATION

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PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

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

	June 30, 2018	December 31, 2017
	(unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 4,451	\$ 5,850
Receivables, net	7,535	6,922
Inventories	6,420	6,384
Prepaid expenses and other	542	156
Total current assets	18,948	19,312
Property, plant, and equipment, at cost	41,266	40,010
Accumulated depreciation	(13,086)	(12,530)
Property, plant, and equipment, net	28,180	27,480
Deferred charges and other assets, net	3,550	3,366
Total assets	\$ 50,678	\$ 50,158
LIABILITIES AND EQUITY		
Current liabilities:		
Current portion of debt and capital lease obligations	\$ 183	\$ 122
Accounts payable	8,963	8,348
Accrued expenses	641	712
Taxes other than income taxes payable	1,334	1,321
Income taxes payable	220	568
Total current liabilities	11,341	11,071
Debt and capital lease obligations, less current portion	8,876	8,750
Deferred income tax liabilities	4,760	4,708
Other long-term liabilities	2,897	2,729
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	7,032	7,039
Treasury stock, at cost; 245,078,683 and 239,603,534 common shares	(13,923)	(13,315)
Retained earnings	29,915	29,200
Accumulated other comprehensive loss	(1,262)	(940)
Total Valero Energy Corporation stockholders' equity	21,769	21,991
Noncontrolling interests	1,035	909
Total equity	22,804	22,900
Total liabilities and equity	\$ 50,678	\$ 50,158

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 June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Revenues (a)	\$ 31,015	\$ 22,254	\$ 57,454	\$ 44,026
Cost of sales:				
Cost of materials and other	27,860	19,609	51,616	39,037
Operating expenses (excluding depreciation and amortization expense reflected below)	1,110	1,111	2,246	2,235
Depreciation and amortization expense	510	485	995	973
Total cost of sales	29,480	21,205	54,857	42,245
Other operating expenses	21	—	31	—
General and administrative expenses (excluding depreciation and amortization expense reflected below)	248	175	486	367
Depreciation and amortization expense	13	14	26	26
Operating income	1,253	860	2,054	1,388
Other income (expense), net	(5)	27	46	53
Interest and debt expense, net of capitalized interest	(124)	(119)	(245)	(240)
Income before income tax expense	1,124	768	1,855	1,201
Income tax expense	249	196	398	308
Net income	875	572	1,457	893
Less: Net income attributable to noncontrolling interests	30	24	143	40
Net income attributable to Valero Energy Corporation stockholders	\$ 845	\$ 548	\$ 1,314	\$ 853
Earnings per common share	\$ 1.96	\$ 1.23	\$ 3.05	\$ 1.90
Weighted-average common shares outstanding (in millions)	429	444	430	446
Earnings per common share – assuming dilution	\$ 1.96	\$ 1.23	\$ 3.04	\$ 1.90
Weighted-average common shares outstanding – assuming dilution (in millions)	431	446	432	448
Dividends per common share	\$ 0.80	\$ 0.70	\$ 1.60	\$ 1.40
Supplemental information:				
(a) Includes excise taxes on sales by certain of our international operations	\$ 1,470	\$ 1,384	\$ 2,934	\$ 2,656

See Condensed Notes to Consolidated Financial Statements.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net income	\$ 875	\$ 572	\$ 1,457	\$ 893
Other comprehensive income (loss):				
Foreign currency translation adjustment	(291)	208	(246)	282
Net gain on pension and other postretirement benefits	9	4	17	7
Other comprehensive income (loss) before income tax expense	(282)	212	(229)	289
Income tax expense related to items of other comprehensive income (loss)	2	1	4	2
Other comprehensive income (loss)	(284)	211	(233)	287
Comprehensive income	591	783	1,224	1,180
Less: Comprehensive income attributable to noncontrolling interests	25	24	141	40
Comprehensive income attributable to Valero Energy Corporation stockholders	\$ 566	\$ 759	\$ 1,083	\$ 1,140

See Condensed Notes to Consolidated Financial Statements.

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

	Six Months Ended June 30,	
	2018	2017
Cash flows from operating activities:		
Net income	\$ 1,457	\$ 893
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization expense	1,021	999
Deferred income tax expense (benefit)	(24)	24
Changes in current assets and current liabilities	(445)	859
Changes in deferred charges and credits and other operating activities, net	188	10
Net cash provided by operating activities	2,197	2,785
Cash flows from investing activities:		
Capital expenditures	(740)	(572)
Deferred turnaround and catalyst costs	(490)	(308)
Investments in joint ventures	(119)	(222)
Capital expenditures of certain variable interest entities	(78)	—
Peru Acquisition, net of cash acquired	(471)	—
Acquisitions of undivided interests	(145)	(72)
Minor acquisitions	(91)	—
Other investing activities, net	2	—
Net cash used in investing activities	(2,132)	(1,174)
Cash flows from financing activities:		
Proceeds from debt issuances and borrowings	1,314	—
Repayments of debt and capital lease obligations	(1,345)	(11)
Purchase of common stock for treasury	(647)	(660)
Common stock dividends	(690)	(627)
Proceeds from issuance of Valero Energy Partners LP common units	—	36
Contribution from noncontrolling interest	32	—
Distributions to noncontrolling interests	(50)	(45)
Other financing activities, net	(16)	(21)
Net cash used in financing activities	(1,402)	(1,328)
Effect of foreign exchange rate changes on cash	(62)	108
Net increase (decrease) in cash and cash equivalents	(1,399)	391
Cash and cash equivalents at beginning of period	5,850	4,816
Cash and cash equivalents at end of period	\$ 4,451	\$ 5,207

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

As used in this report, the terms “Valero,” “we,” “us,” or “our” 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 six months ended June 30, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018.

The balance sheet as of December 31, 2017 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, 2017.

Reclassifications

Certain prior period amounts have been reclassified to conform to the 2018 presentation.

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 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.

Revenue Recognition

Background

We adopted the provisions of Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 606, “Revenue from Contracts with Customers,” (Topic 606) on January 1, 2018, as described below in “Accounting Pronouncements Adopted on January 1, 2018.” Accordingly, our revenue recognition accounting policy has been revised to reflect the adoption of this standard.

Revised Policy

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

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

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

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

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

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

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

Accounting Pronouncements Adopted on January 1, 2018

Topic 606

As previously noted, we adopted the provisions of Topic 606 on January 1, 2018. Topic 606 clarifies the principles for recognizing revenue and supersedes previous revenue recognition requirements under “Revenue Recognition (Topic 605),” using the modified retrospective method of adoption as permitted by the standard. Under this method, the cumulative effect of initially applying the standard is recognized as an adjustment to the opening balance of retained earnings, and revenues reported in the periods prior to the date of adoption are not changed. We elected to apply the transition guidance for Topic 606 only to contracts that were not completed as of the date of adoption. There was no material impact to our financial position as a result of adopting Topic 606; therefore, there was no cumulative-effect adjustment to retained earnings as of January 1, 2018. Additionally, there was no material impact to our financial position or results of operations as of and for the three and six months ended June 30, 2018. See “Revenue Recognition” above for a discussion of our accounting policy affected by our adoption of Topic 606. Also see Note 11 for further information on

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

our revenues. We implemented new processes in order to monitor ongoing compliance with accounting and disclosure requirements.

ASU No. 2016-01

In January 2016, the FASB issued Accounting Standards Update (ASU) No. 2016-01, “Financial Instruments—Overall (Subtopic 825-10),” (ASU No. 2016-01) to enhance the reporting model for financial instruments regarding certain aspects of recognition, measurement, presentation, and disclosure. Effective January 1, 2018, we adopted the provisions of ASU No. 2016-01 using the cumulative-effect method of adoption as required by the ASU. The adoption of this ASU did not affect our financial position or our results of operations as of or for the three and six months ended June 30, 2018, but it resulted in reduced disclosures as it eliminated the requirement to disclose the methods and significant assumptions used to estimate the fair value of financial instruments.

ASU No. 2017-07

In March 2017, the FASB issued ASU No. 2017-07, “Compensation—Retirement Benefits (Topic 715),” (ASU No. 2017-07) which requires employers to report the service cost component of net periodic pension cost and net periodic postretirement benefit cost in the same line item as other compensation costs arising from services rendered by the pertinent employees during the period. It also requires the other components of net periodic pension cost and net periodic postretirement benefit cost (non-service cost components) to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations. Effective January 1, 2018, we retrospectively adopted the provisions of ASU No. 2017-07. The adoption of this ASU did not affect our financial position or results of operations, but did result in the reclassification of non-service cost components from operating expenses (excluding depreciation and amortization expense) and general and administrative expenses (excluding depreciation and amortization expense) to other income (expense), net. This resulted in an increase of \$14 million and \$21 million in operating expenses (excluding depreciation and amortization expense) and a decrease of \$3 million and \$1 million in general and administrative expenses (excluding depreciation and amortization expense) for the three and six months ended June 30, 2017, respectively.

ASU No. 2017-09

In May 2017, the FASB issued ASU No. 2017-09, “Compensation—Stock Compensation (Topic 718),” (ASU No. 2017-09) to reduce diversity in practice, as well as reduce cost and complexity regarding a change to the terms or conditions of a share-based payment award. Effective January 1, 2018, we adopted ASU No. 2017-09. The adoption of this ASU did not have an immediate effect on our financial position or results of operations as it is applied prospectively to an award modified on or after adoption.

ASU No. 2018-02

In February 2018, the FASB issued ASU No. 2018-02, “Income Statement—Reporting Comprehensive Income (Topic 220),” (ASU No. 2018-02) which allows for the stranded tax effects resulting from the Tax Cuts and Jobs Act of 2017 (Tax Reform) to be reclassified from accumulated other comprehensive income to retained earnings. The provisions of ASU No. 2018-02 are effective for annual reporting periods beginning after December 15, 2018, and interim reporting periods within those annual periods, with early adoption permitted. This ASU shall be applied either at the beginning of the annual or interim period of adoption or retrospectively to each period in which the income tax effects of Tax Reform affects the items remaining in accumulated other comprehensive income. We elected to reclassify the stranded income tax effects of Tax Reform from accumulated other comprehensive loss to retained earnings as of the beginning of the interim

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

period of adoption. Effective January 1, 2018, we adopted ASU No. 2018-02 and such adoption did not affect our financial position or results of operations but resulted in the reclassification of \$91 million of income tax benefits related to Tax Reform from accumulated other comprehensive loss to retained earnings as presented in Note 6 under “*Accumulated Other Comprehensive Loss*.” We release stranded income tax effects from accumulated other comprehensive loss to retained earnings on an individual item basis as those items are reclassified into income.

ASU No. 2018-05

In March 2018, the FASB issued ASU No. 2018-05, “Income Taxes (Topic 740)—Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118,” (ASU No. 2018-05) which amends certain Securities and Exchange Commission (SEC) material in Topic 740 for the income tax accounting implications of the recently issued Tax Reform. This guidance clarifies the application of Topic 740 in situations where a registrant does not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting under Topic 740 for certain income tax effects of Tax Reform for the reporting period in which Tax Reform was enacted. See Note 9 for a discussion of the impact of this ASU.

Accounting Pronouncements Not Yet Adopted

Topic 842

In February 2016, the FASB issued “Leases (Topic 842),” (Topic 842) to increase the transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. This new standard is effective for annual reporting periods beginning after December 15, 2018, and interim reporting periods within those annual periods, with early adoption permitted. We will adopt this new standard on January 1, 2019, and we expect to use the optional transition method, which allows us to recognize a cumulative-effect adjustment to the opening balance of retained earnings at the date of adoption. We are enhancing our contracting and lease evaluation systems and related processes, and we are developing a new lease accounting system to capture our leases and support the required disclosures. During 2018, we will continue to monitor the adoption process to ensure compliance with accounting and disclosure requirements. We also continue the integration of our lease accounting system with our general ledger, and we will make modifications to the related procurement and payment processes. We anticipate this standard will have a material impact on our financial position by increasing our assets and liabilities by equal amounts through the recognition of right-of-use assets and lease liabilities for our operating leases. However, we do not expect adoption to have a material impact on our results of operations or liquidity. We expect our accounting for capital leases to remain substantially unchanged.

ASU No. 2017-12

In August 2017, the FASB issued ASU No. 2017-12, “Derivatives and Hedging (Topic 815),” (ASU No. 2017-12) to improve and simplify accounting guidance for hedge accounting. The provisions of this ASU are effective for annual reporting periods beginning after December 15, 2018, and interim reporting periods within those annual periods, with early adoption permitted. We use economic hedges to manage commodity price risk; however, we have not designated these hedges as fair value or cash flow hedges. As a result, the adoption of ASU No. 2017-12 effective January 1, 2019 is not expected to affect our financial position or results of operations.

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

2. ACQUISITION

Peru Acquisition

On May 14, 2018, we acquired 100 percent of the issued and outstanding equity interests in Pure Biofuels del Peru S.A.C. (Pure Biofuels) from Pegasus Capital Advisors L.P. and various minority equity holders (collectively, the sellers). Pure Biofuels markets refined petroleum products through a network of logistics assets throughout Peru. Pure Biofuels owns a terminal at the Port of Callao, near Lima, with approximately 1 million barrels of storage capacity for refined petroleum and renewable products. Through one of its subsidiaries, Pure Biofuels also owns a 180,000 -barrel storage terminal in Paita, in northern Peru, which is scheduled to commence operations later in 2018. We paid \$471 million from available cash on hand, of which \$122 million was for working capital. The amount paid for working capital is subject to adjustment pending the final working capital settlement that is expected to be completed in the third quarter of 2018. This acquisition, which is referred to as the Peru Acquisition, is consistent with our general business strategy and broadens the geographic diversity of our refining and marketing network.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the acquisition date, which are preliminary and subject to change after the completion of an independent appraisal and other evaluations (in millions).

Current assets, net of cash acquired	\$ 147
Property, plant, and equipment	137
Deferred charges and other assets	451
Current liabilities, excluding current portion of debt	(25)
Debt assumed, including current portion	(137)
Deferred income tax liabilities	(81)
Other long-term liabilities	(21)
Total consideration, net of cash acquired	<u>\$ 471</u>

Deferred charges and other assets primarily include identifiable intangible assets of \$210 million and goodwill of \$228 million. Identifiable intangible assets, which consist of customer contracts and relationships, are expected to be amortized on a straight-line basis over ten years. Goodwill is calculated as the excess of the consideration transferred over the estimated fair values of the underlying tangible and identifiable intangible assets acquired and liabilities assumed. Goodwill represents the future economic benefits expected to be recognized from our expansion into the South American refined petroleum products market arising from other assets acquired that were not individually identified and separately recognized. We determined that the entire balance of goodwill is related to the refining segment. None of the goodwill is expected to be deductible for tax purposes.

The Peru Acquisition purchase agreement provides for a potential earn-out payment based on Pure Biofuels' earnings for the period from January 1, 2021 through December 31, 2021, or if certain events occur, for the period from January 1, 2020 through December 31, 2020. The sellers are entitled to receive the contingent earn-out payments if certain financial metrics are achieved by Pure Biofuels. As of June 30, 2018, we did not record a contingent liability with respect to this earn-out agreement based on our preliminary estimate of its fair value.

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

Other Disclosures

Our consolidated statements of income include the results of operations of Pure Biofuels since the date of acquisition, and such results are reflected in the refining segment. Results of operations since the date of acquisition, supplemental pro forma financial information, and acquisition-related costs have not been presented for the Peru Acquisition as such information is not material to our results of operations.

3. INVENTORIES

Inventories consisted of the following (in millions):

	June 30, 2018	December 31, 2017
Refinery feedstocks	\$ 2,213	\$ 2,427
Refined petroleum products and blendstocks	3,717	3,459
Ethanol feedstocks and products	231	242
Materials and supplies	259	256
Inventories	<u>\$ 6,420</u>	<u>\$ 6,384</u>

As of June 30, 2018 and December 31, 2017 , the replacement cost (market value) of LIFO inventories exceeded their LIFO carrying amounts by \$3.9 billion and \$3.0 billion , respectively, and our non-LIFO inventories accounted for \$1.1 billion and \$1.0 billion , respectively, of our total inventories.

4. DEBT AND CAPITAL LEASE OBLIGATIONS

Debt

During the six months ended June 30, 2018 , the following activity occurred:

- We issued in a public offering \$750 million aggregate principal amount of our 4.35 percent Senior Notes due June 1, 2028 . Gross proceeds from this debt issuance were \$749 million before deducting the underwriting discount and other debt issuance costs totaling \$7 million . The proceeds were used to redeem our 9.375 percent Senior Notes due March 15, 2019 (9.375 percent Senior Notes) for \$787 million , which includes an early redemption fee of \$37 million that was charged to other income (expense), net.
- VLP issued in a public offering \$500 million aggregate principal amount of its 4.5 percent Senior Notes due March 15, 2028 . Gross proceeds from this debt issuance were \$498 million before deducting the underwriting discount and other debt issuance costs totaling \$5 million . The proceeds are available only to the operations of VLP and were used to repay the outstanding balance of \$410 million on VLP's \$750 million senior unsecured revolving credit facility (the VLP Revolver) and \$85 million of its notes payable to us, which is eliminated in consolidation.
- Central Mexico Terminals, which is the name used by us to refer to one of our consolidated variable interest entities (VIEs) and which is further described and defined in Note 7, entered into a combined \$340 million unsecured revolving credit facility (IEnova Revolver) with IEnova (defined in Note 7). Central Mexico Terminals borrowed \$56 million and had no repayments under the IEnova Revolver.

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

The IEnova Revolver matures in February 2028 . However, IEnova may terminate the IEnova Revolver at any time and demand repayment of all outstanding amounts; therefore, such amounts are reflected in current portion of debt. The IEnova Revolver is available only to the operations of Central Mexico Terminals, and the creditors of Central Mexico Terminals do not have recourse against Valero.

Outstanding borrowings under the IEnova Revolver bear interest at the three-month LIBO rate for the applicable interest period in effect from time to time plus the applicable margin. The interest rate under the IEnova Revolver is subject to adjustment, with agreement by both parties, based upon changes in market conditions. As of June 30, 2018, the variable rate was 5.958 percent.

- We retired \$137 million of debt assumed in connection with the Peru Acquisition with available cash on hand.

During the six months ended June 30, 2017 , we had no significant debt activity.

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):

			June 30, 2018			
	Facility Amount	Maturity Date	Outstanding Borrowings	Letters of Credit Issued	Availability	
Committed facilities:						
Valero Revolver	\$ 3,000	November 2020	\$ —	\$ 119	\$ 2,881	
VLP Revolver	750	November 2020	—	—	750	
IEnova Revolver	340	February 2028	56	n/a	284	
Canadian Revolver	C\$ 75	November 2018	C\$ —	C\$ 6	C\$ 69	
Accounts receivable sales facility (a)	1,300	July 2018	100	n/a	1,200	
Letter of credit facility	100	November 2018	n/a	—	100	
Uncommitted facilities:						
Letter of credit facilities	n/a	n/a	n/a	301	n/a	

(a) In July 2018, we amended this facility to extend the maturity date from July 2018 to July 2019 .

Letters of credit issued as of June 30, 2018 expire at various times in 2018 through 2020 .

As of June 30, 2018 and December 31, 2017 , the variable interest rate on the accounts receivable sales facility was 2.7009 percent and 2.0387 percent, respectively.

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

Other Disclosures

Interest and debt expense, net of capitalized interest is comprised of the following (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Interest and debt expense	\$ 144	\$ 134	\$ 283	\$ 268
Less capitalized interest	20	15	38	28
Interest and debt expense, net of capitalized interest	<u>\$ 124</u>	<u>\$ 119</u>	<u>\$ 245</u>	<u>\$ 240</u>

5. COMMITMENTS AND CONTINGENCIES

Commitments

MVP Terminal

We have a 50 percent membership interest in MVP Terminalling, LLC (MVP), a Delaware limited liability company formed in September 2017 with a subsidiary of Magellan Midstream Partners LP (Magellan), to construct, own, and operate the Magellan Valero Pasadena marine terminal (MVP Terminal) located adjacent to the Houston Ship Channel in Pasadena, Texas. Construction of phases one and two of the project began in 2017 with a total estimated cost of \$840 million of which we have committed to contribute 50 percent (approximately \$420 million). The project could expand up to four phases with a total project cost of approximately \$1.4 billion if warranted by additional demand and agreed to by Magellan and us. Since inception, we have contributed \$185 million to MVP of which \$104 million was contributed during the six months ended June 30, 2018.

Concurrent with the formation of MVP, we entered into a terminaling agreement with MVP to utilize the MVP Terminal upon completion of phase two, which is expected to occur in early 2020. The terminaling agreement has an initial term of 12 years with two five-year automatic renewals, and year-to-year renewals thereafter.

Due to our membership interest in MVP and because we determined that the terminaling agreement was a capital lease, we are the accounting owner of the MVP Terminal during the construction period. Accordingly, as of June 30, 2018, we recorded an asset of \$370 million in property, plant, and equipment representing 100 percent of the construction costs incurred by MVP, as well as capitalized interest incurred by us, and a long-term liability of \$186 million payable to Magellan. The amounts recorded for the portion of the construction costs associated with the payable to Magellan are noncash investing and financing items, respectively.

Central Texas Pipeline

We have committed to a 40 percent undivided interest in a project with a subsidiary of Magellan to jointly build an estimated 135-mile, 20-inch refined petroleum products pipeline with a capacity of up to 150,000 barrels per day from Houston to Hearne, Texas. The pipeline is expected to be completed in mid-2019. The estimated cost of our 40 percent undivided interest in this pipeline is \$170 million. Since inception, capital expenditures have totaled \$49 million, of which \$42 million was spent during the six months ended June 30, 2018.

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

Sunrise Pipeline System

Effective January 31, 2018, we entered into a joint ownership agreement with Sunrise Pipeline LLC, a subsidiary of Plains All American Pipeline, L.P. (Plains), that provides us a 20 percent undivided interest in the Sunrise Pipeline System expansion to be constructed by Plains. The Sunrise Pipeline System is expected to contain (i) an estimated 255 -mile, 24 -inch crude oil pipeline (the Sunrise Pipeline) that originates at Plains' terminal in Midland, Texas and ends at Plains' station in Wichita Falls, Texas with throughput capacity of approximately 500,000 barrels per day, and (ii) two 270,000 shell barrel capacity tanks located at the Colorado City, Texas station. The Sunrise Pipeline System expansion is currently under construction and is expected to be placed in service in 2019. The estimated cost of our 20 percent undivided interest in the Sunrise Pipeline System is \$135 million . Capital expenditures totaled \$103 million for the six months ended June 30, 2018 .

Environmental Matters

We are involved, together with several other companies, in an environmental cleanup in the Village of Hartford, Illinois (the Village) and during 2015, one of these companies assumed the ongoing environmental cleanup in the Village pursuant to a federal court order. We had previously conducted an initial response in the Village, along with other companies, pursuant to an administrative order issued by the U.S. Environmental Protection Agency (EPA). The parties involved in the initial response may have further claims among themselves for costs already incurred.

We also continue to be engaged in site assessment and interim measures at our shutdown refinery site, which is adjacent to the Village. During the second quarter of 2018, we entered into a consent order with the Illinois EPA that we anticipate will be approved by the state court. In the consent order, we have assumed the underlying liability for full cleanup of our shutdown refinery site. As a result, we recorded an adjustment to our existing environmental liability related to this matter, which did not materially affect our financial position or results of operations as of or for the three and six months ended June 30, 2018 . We continue to seek contribution under Illinois law in state court and are pursuing claims under the Comprehensive Environmental Response, Compensation and Liability Act in federal court from other potentially responsible parties. Factors underlying the expected cost of the cleanup are subject to change from time to time, and actual results may vary significantly from the current estimate.

Litigation Matters

We are party to claims and legal proceedings arising in the ordinary course of business. We have not recorded a loss contingency liability with respect to some of these matters because we have determined that it is remote that a loss has been incurred. For other matters, we have recorded a loss contingency liability where we have determined that it is probable that a loss has been incurred and that the loss is reasonably estimable. These loss contingency liabilities are not material to our financial position. We re-evaluate and update our loss contingency liabilities as matters progress over time, and we believe that any changes to the recorded liabilities will not be material to our financial position, results of operations, or liquidity.

Texas City Refinery Fire

In April 2018, our Texas City Refinery experienced a fire in its alkylation unit. The costs to respond to and assess the damage caused by the fire are included in other operating expenses in the statements of income. This incident did not have a material adverse effect on our results of operations.

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

6. EQUITY

Reconciliation of Balances

The following is a reconciliation of the beginning and ending balances of equity attributable to our stockholders, equity attributable to noncontrolling interests, and total equity (in millions):

	Six Months Ended June 30,					
	2018			2017		
	Valero Stockholders' Equity	Non- controlling Interests (a)	Total Equity	Valero Stockholders' Equity	Non- controlling Interests (a)	Total Equity
Balance as of beginning of period	\$ 21,991	\$ 909	\$ 22,900	\$ 20,024	\$ 830	\$ 20,854
Net income	1,314	143	1,457	853	40	893
Dividends	(690)	—	(690)	(627)	—	(627)
Stock-based compensation expense	29	—	29	25	—	25
Transactions in connection with stock-based compensation plans	(134)	—	(134)	(13)	—	(13)
Stock purchases under purchase programs	(508)	—	(508)	(649)	—	(649)
Contribution from noncontrolling interest	—	32	32	—	—	—
Distributions to noncontrolling interests	—	(50)	(50)	—	(45)	(45)
Other	(2)	3	1	23	17	40
Other comprehensive income (loss)	(231)	(2)	(233)	287	—	287
Balance as of end of period	\$ 21,769	\$ 1,035	\$ 22,804	\$ 19,923	\$ 842	\$ 20,765

(a) The noncontrolling interests relate to third-party ownership interests in VIEs for which we are the primary beneficiary and therefore consolidate. See Note 7 for information about our consolidated VIEs.

Share Activity

There was no significant share activity during the six months ended June 30, 2018 and 2017 .

Common Stock Dividends

On July 20, 2018 , our board of directors declared a quarterly cash dividend of \$0.80 per common share payable on September 5, 2018 to holders of record at the close of business on August 7, 2018 .

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):

	Six Months Ended June 30,					
	2018			2017		
	Foreign Currency Translation Adjustment	Defined Benefit Plans Items	Total	Foreign Currency Translation Adjustment	Defined Benefit Plans Items	Total
Balance as of beginning of period	\$ (507)	\$ (433)	\$ (940)	\$ (1,021)	\$ (389)	\$ (1,410)
Other comprehensive income (loss) before reclassifications	(244)	—	(244)	282	—	282
Amounts reclassified from accumulated other comprehensive loss	—	13	13	—	5	5
Other comprehensive income (loss)	(244)	13	(231)	282	5	287
Reclassification of stranded income tax effects of Tax Reform to retained earnings per ASU 2018-02 (see Note 1)	—	(91)	(91)	—	—	—
Balance as of end of period	<u>\$ (751)</u>	<u>\$ (511)</u>	<u>\$ (1,262)</u>	<u>\$ (739)</u>	<u>\$ (384)</u>	<u>\$ (1,123)</u>

7. 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. Our significant consolidated VIE's include:

- VLP, a publicly traded master limited partnership formed to own, operate, develop, and acquire crude oil and refined petroleum products pipelines, terminals, and other transportation and logistics assets;
- Diamond Green Diesel Holdings LLC (DGD), a joint venture formed to construct and operate a biodiesel plant that processes animal fats, used cooking oils, and other vegetable oils into renewable green diesel; and
- Central Mexico Terminals (previously referred to by us as VPM Terminals), a collective group of three subsidiaries of Infraestructura Energetica Nova, S.A.B. de C.V. (IEnova), a Mexican company and subsidiary of Sempra 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 VIEs' assets can only be used to settle their own obligations and the VIEs' creditors have no recourse to our assets. We do not provide financial guarantees to our VIEs. Although we have provided credit facilities to some of our VIEs in support of their construction or acquisition activities, these transactions are eliminated

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

in consolidation. Our financial position, results of operations, and cash flows are impacted by our consolidated VIEs' performance, 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).

June 30, 2018					
	VLP	DGD	Central Mexico Terminals	Other	Total
Assets					
Cash and cash equivalents	\$ 100	\$ 167	\$ 2	\$ 14	\$ 283
Other current assets	1	50	13	—	64
Property, plant, and equipment, net	1,413	529	107	119	2,168
Liabilities					
Current liabilities	\$ 27	\$ 29	\$ 63	\$ 6	\$ 125
Debt and capital lease obligations, less current portion	989	—	—	38	1,027

December 31, 2017					
	VLP	DGD	Central Mexico Terminals	Other	Total
Assets					
Cash and cash equivalents	\$ 42	\$ 123	\$ 1	\$ 13	\$ 179
Other current assets	2	66	4	—	72
Property, plant, and equipment, net	1,416	435	51	127	2,029
Liabilities					
Current liabilities	\$ 27	\$ 33	\$ 26	\$ 9	\$ 95
Debt and capital lease obligations, less current portion	905	—	—	43	948

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 primarily accounted for as equity investments. MVP is one of our non-consolidated VIEs and is accounted for under owner accounting as described in Note 5. As of June 30, 2018, our maximum exposure to loss was \$185 million, which represents our equity investment in MVP. We have not provided any financial support to MVP other than amounts previously required by our membership interest.

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

8. EMPLOYEE BENEFIT PLANS

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

	Pension Plans		Other Postretirement Benefit Plans	
	2018	2017	2018	2017
Three months ended June 30:				
Service cost	\$ 33	\$ 30	\$ 2	\$ 2
Interest cost	23	22	3	2
Expected return on plan assets	(41)	(38)	—	—
Amortization of:				
Net actuarial (gain) loss	17	14	(1)	(1)
Prior service credit	(4)	(5)	(3)	(4)
Special charges	3	—	—	—
Net periodic benefit cost (credit)	<u>\$ 31</u>	<u>\$ 23</u>	<u>\$ 1</u>	<u>\$ (1)</u>
Six months ended June 30:				
Service cost	\$ 67	\$ 61	\$ 3	\$ 3
Interest cost	46	43	5	5
Expected return on plan assets	(82)	(75)	—	—
Amortization of:				
Net actuarial (gain) loss	33	27	(1)	(2)
Prior service credit	(9)	(10)	(6)	(8)
Special charges	5	—	—	—
Net periodic benefit cost (credit)	<u>\$ 60</u>	<u>\$ 46</u>	<u>\$ 1</u>	<u>\$ (2)</u>

The components of net periodic benefit cost (credit) other than the service cost component (*i.e.* , the non-service cost components) are included in the line item other income (expense), net in the statements of income.

We contributed \$16 million and \$14 million , respectively, to our pension plans and \$9 million and \$13 million , respectively, to our other postretirement benefit plans during the six months ended June 30, 2018 and 2017 .

Management has elected to increase the discretionary contributions to our pension plans by \$10 million during the second half of 2018, resulting in expected contributions to our pension plans of approximately \$141 million for 2018, which includes discretionary contributions of \$110 million . Our anticipated contributions to our other postretirement benefit plans during 2018 have not changed from the amount previously disclosed in our financial statements for the year ended December 31, 2017 .

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

9. INCOME TAXES

On December 22, 2017, Tax Reform was enacted, which resulted in significant changes to the U.S. Internal Revenue Code of 1986, as amended (the Code), and was effective beginning on January 1, 2018. Tax Reform introduced significant and complex changes to the Code, and regulatory guidance from the Internal Revenue Service (IRS) is needed in order to properly account for many of the changes. In response, the SEC issued Staff Accounting Bulletin No. 118, “Income Tax Accounting Implications of the Tax Cuts and Jobs Act,” that was codified through the issuance of ASU No. 2018-05 as described in Note 1, which requires that the effects of Tax Reform be recorded for items where the accounting is complete, as well as for items where a reasonable estimate can be made (referred to as provisional amounts). For items where reasonable estimates cannot be made, provisional amounts should not be recorded and those items should continue to be accounted for under the Code prior to changes from Tax Reform until a reasonable estimate can be made.

We recorded the effects of Tax Reform for the year ended December 31, 2017 in accordance with ASU No. 2018-05, which included provisional amounts associated with the one-time transition tax on the deemed repatriation of previously undistributed accumulated earnings and profits of our international subsidiaries. We also identified items where reasonable estimates could not be made at that time.

We did not revise our initial provisional estimate during the three and six months ended June 30, 2018, and we have not completed our accounting for the income tax effects of Tax Reform. We continue to gather additional information in order to revise our initial estimates and await regulatory guidance from the IRS. We anticipate this information and guidance will be available in the second half of 2018 and that any adjustments will be recorded at that time.

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

10. EARNINGS PER COMMON SHARE

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

	Three Months Ended June 30,			
	2018		2017	
	Participating Securities	Common Stock	Participating Securities	Common Stock
Earnings per common share:				
Net income attributable to Valero stockholders		\$ 845		\$ 548
Less dividends paid:				
Common stock		344		311
Participating securities		1		1
Undistributed earnings		\$ 500		\$ 236
Weighted-average common shares outstanding	1	429	2	444
Earnings per common share:				
Distributed earnings	\$ 0.80	\$ 0.80	\$ 0.70	\$ 0.70
Undistributed earnings	1.16	1.16	0.53	0.53
Total earnings per common share	\$ 1.96	\$ 1.96	\$ 1.23	\$ 1.23
Earnings per common share – assuming dilution:				
Net income attributable to Valero stockholders		\$ 845		\$ 548
Weighted-average common shares outstanding		429		444
Common equivalent shares		2		2
Weighted-average common shares outstanding – assuming dilution		431		446
Earnings per common share – assuming dilution		\$ 1.96		\$ 1.23

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

	Six Months Ended June 30,			
	2018		2017	
	Participating Securities	Common Stock	Participating Securities	Common Stock
Earnings per common share:				
Net income attributable to Valero stockholders		\$ 1,314		\$ 853
Less dividends paid:				
Common stock		688		625
Participating securities		2		2
Undistributed earnings		\$ 624		\$ 226
Weighted-average common shares outstanding	1	430	2	446
Earnings per common share:				
Distributed earnings	\$ 1.60	\$ 1.60	\$ 1.40	\$ 1.40
Undistributed earnings	1.45	1.45	0.50	0.50
Total earnings per common share	\$ 3.05	\$ 3.05	\$ 1.90	\$ 1.90
Earnings per common share – assuming dilution:				
Net income attributable to Valero stockholders		\$ 1,314		\$ 853
Weighted-average common shares outstanding		430		446
Common equivalent shares		2		2
Weighted-average common shares outstanding – assuming dilution		432		448
Earnings per common share – assuming dilution		\$ 3.04		\$ 1.90

Participating securities include restricted stock and performance awards granted under our 2011 Omnibus Stock Incentive Plan.

11. 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 the financial statements.

Receivables from Contracts with Customers

Our receivables from contracts with customers are included in receivables, net and totaled \$5.7 billion as of June 30, 2018 and January 1, 2018.

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

Remaining Performance Obligations

The majority of our contracts with customers are spot contracts and therefore have no remaining performance obligations. All of our remaining contracts with customers are primarily term contracts, the majority of which expire by 2020. The transaction price for these term contracts includes an immaterial fixed amount and variable consideration (*i.e.* , a commodity price). The variable consideration is allocated entirely to a wholly unsatisfied promise to transfer a distinct good that forms part of a single performance obligation; therefore, the variable consideration is not included in the remaining performance obligation. As of June 30, 2018, after excluding contracts with an original expected duration of one year or less, the aggregate amount of the transaction price allocated to our remaining performance obligations was immaterial as the transaction price for these contracts includes only an immaterial fixed amount.

Segment Information

We have three reportable segments – refining, ethanol, and VLP. 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 certain logistics assets that support our refining operations that are not owned by VLP. The principal products manufactured by our refineries and sold by this segment include gasolines and blendstocks (*e.g.* , conventional gasolines, premium gasolines, and gasoline meeting the specifications of the California Air Resources Board (CARB)), distillates (*e.g.* , diesel, low-sulfur diesel, ultra-low-sulfur diesel, CARB diesel, jet fuel, and other distillates), and other products (*e.g.* , asphalt, petrochemicals, lubricants, and other refined petroleum products).
- The *ethanol segment* includes the operations of our 11 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. We sell some ethanol to our refining segment for blending into gasoline, which is sold to that segment’s customers as a finished gasoline product.
- The *VLP segment* includes the results of VLP. VLP generates revenue from transportation and terminaling activities provided to our refining segment. All of VLP’s revenues are intersegment revenues that are generated under commercial agreements with our refining segment. Revenues generated under these agreements are eliminated in consolidation.

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 table reflects the components of operating income by reportable segment (in millions):

	Refining	Ethanol	VLP	Corporate and Eliminations	Total
Three months ended June 30, 2018:					
Revenues:					
Revenues from external customers	\$ 30,130	\$ 884	\$ —	\$ 1	\$ 31,015
Intersegment revenues	1	42	135	(178)	—
Total revenues	30,131	926	135	(177)	31,015
Cost of sales:					
Cost of materials and other	27,283	754	—	(177)	27,860
Operating expenses (excluding depreciation and amortization expense reflected below)	969	109	33	(1)	1,110
Depreciation and amortization expense	471	20	19	—	510
Total cost of sales	28,723	883	52	(178)	29,480
Other operating expenses	21	—	—	—	21
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	248	248
Depreciation and amortization expense	—	—	—	13	13
Operating income by segment	\$ 1,387	\$ 43	\$ 83	\$ (260)	\$ 1,253
Three months ended June 30, 2017:					
Revenues:					
Revenues from external customers	\$ 21,415	\$ 839	\$ —	\$ —	\$ 22,254
Intersegment revenues	—	28	110	(138)	—
Total revenues	21,415	867	110	(138)	22,254
Cost of sales:					
Cost of materials and other	19,037	710	—	(138)	19,609
Operating expenses (excluding depreciation and amortization expense reflected below)	979	107	27	(2)	1,111
Depreciation and amortization expense	454	19	12	—	485
Total cost of sales	20,470	836	39	(140)	21,205
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	175	175
Depreciation and amortization expense	—	—	—	14	14
Operating income by segment	\$ 945	\$ 31	\$ 71	\$ (187)	\$ 860

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

	Refining	Ethanol	VLP	Corporate and Eliminations	Total
Six months ended June 30, 2018:					
Revenues:					
Revenues from external customers	\$ 55,691	\$ 1,761	\$ —	\$ 2	\$ 57,454
Intersegment revenues	5	88	267	(360)	—
Total revenues	55,696	1,849	267	(358)	57,454
Cost of sales:					
Cost of materials and other	50,471	1,503	—	(358)	51,616
Operating expenses (excluding depreciation and amortization expense reflected below)	1,966	220	62	(2)	2,246
Depreciation and amortization expense	919	38	38	—	995
Total cost of sales	53,356	1,761	100	(360)	54,857
Other operating expenses	31	—	—	—	31
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	486	486
Depreciation and amortization expense	—	—	—	26	26
Operating income by segment	\$ 2,309	\$ 88	\$ 167	\$ (510)	\$ 2,054
Six months ended June 30, 2017:					
Revenues:					
Revenues from external customers	\$ 42,302	\$ 1,724	\$ —	\$ —	\$ 44,026
Intersegment revenues	—	88	216	(304)	—
Total revenues	42,302	1,812	216	(304)	44,026
Cost of sales:					
Cost of materials and other	37,844	1,497	—	(304)	39,037
Operating expenses (excluding depreciation and amortization expense reflected below)	1,970	216	51	(2)	2,235
Depreciation and amortization expense	903	46	24	—	973
Total cost of sales	40,717	1,759	75	(306)	42,245
General and administrative expenses (excluding depreciation and amortization expense reflected below)	—	—	—	367	367
Depreciation and amortization expense	—	—	—	26	26
Operating income by segment	\$ 1,585	\$ 53	\$ 141	\$ (391)	\$ 1,388

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

The following table provides a disaggregation of revenues by reportable segment (in millions). Refining and ethanol segment revenues are disaggregated for our principal products, and VLP segment revenues are disaggregated by activity type.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Refining:				
Gasolines and blendstocks	\$ 12,514	\$ 9,723	\$ 23,143	\$ 19,058
Distillates	14,459	9,736	27,117	19,432
Other product revenues	3,157	1,956	5,431	3,812
Total refining revenues	30,130	21,415	55,691	42,302
Ethanol:				
Ethanol	696	712	1,397	1,462
Distillers grains	188	127	364	262
Total ethanol revenues	884	839	1,761	1,724
VLP:				
Pipeline transportation	31	25	62	48
Terminaling	103	84	202	167
Storage and other	1	1	3	1
Total VLP revenues	135	110	267	216
Corporate – other revenues	1	—	2	—
Elimination of intersegment revenues	(135)	(110)	(267)	(216)
Revenues	\$ 31,015	\$ 22,254	\$ 57,454	\$ 44,026

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

	June 30, 2018	December 31, 2017
Refining	\$ 42,107	\$ 40,382
Ethanol	1,332	1,344
VLP	1,569	1,517
Corporate and eliminations	5,670	6,915
Total assets	\$ 50,678	\$ 50,158

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

12. SUPPLEMENTAL CASH FLOW INFORMATION

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

	Six Months Ended June 30,	
	2018	2017
Decrease (increase) in current assets:		
Receivables, net	\$ (595)	\$ 1,396
Inventories	(46)	123
Prepaid expenses and other	(35)	86
Increase (decrease) in current liabilities:		
Accounts payable	661	(942)
Accrued expenses	(83)	262
Taxes other than income taxes payable	28	(41)
Income taxes payable	(375)	(25)
Changes in current assets and current liabilities	<u>\$ (445)</u>	<u>\$ 859</u>

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

	Six Months Ended June 30,	
	2018	2017
Interest paid in excess of amount capitalized	\$ 248	\$ 235
Income taxes paid, net	817	263

There were no significant noncash investing and financing activities for the six months ended June 30, 2018 . Noncash investing and financing activities during the six months ended June 30, 2017 included the recognition of capital lease assets and related obligations totaling approximately \$490 million for the lease of storage tanks located at three of our refineries.

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

13. 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 June 30, 2018 and December 31, 2017 .

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.

	June 30, 2018							
	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	\$ 1,402	\$ 34	\$ —	\$ 1,436	\$ (1,434)	\$ —	\$ 2	\$ —
Foreign currency contracts	2	—	—	2	n/a	n/a	2	n/a
Investments of certain benefit plans	61	—	9	70	n/a	n/a	70	n/a
Total	\$ 1,465	\$ 34	\$ 9	\$ 1,508	\$ (1,434)	\$ —	\$ 74	
Liabilities:								
Commodity derivative contracts	\$ 1,430	\$ 37	\$ —	\$ 1,467	\$ (1,434)	\$ (32)	\$ 1	\$ (57)
Environmental credit obligations	—	70	—	70	n/a	n/a	70	n/a
Physical purchase contracts	—	13	—	13	n/a	n/a	13	n/a
Total	\$ 1,430	\$ 120	\$ —	\$ 1,550	\$ (1,434)	\$ (32)	\$ 84	

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

December 31, 2017

	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	\$ 875	\$ 19	\$ —	\$ 894	\$ (893)	\$ —	\$ 1	\$ —
Investments of certain benefit plans	65	—	8	73	n/a	n/a	73	n/a
Total	<u>\$ 940</u>	<u>\$ 19</u>	<u>\$ 8</u>	<u>\$ 967</u>	<u>\$ (893)</u>	<u>\$ —</u>	<u>\$ 74</u>	
Liabilities:								
Commodity derivative contracts	\$ 955	\$ 14	\$ —	\$ 969	\$ (893)	\$ (76)	\$ —	\$ (102)
Environmental credit obligations	—	104	—	104	n/a	n/a	104	n/a
Physical purchase contracts	—	6	—	6	n/a	n/a	6	n/a
Foreign currency contracts	7	—	—	7	n/a	n/a	7	n/a
Total	<u>\$ 962</u>	<u>\$ 124</u>	<u>\$ —</u>	<u>\$ 1,086</u>	<u>\$ (893)</u>	<u>\$ (76)</u>	<u>\$ 117</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 and swaps. These contracts are measured at fair value using the market approach. Exchange-traded futures are valued based on quoted prices from the exchange and are categorized in Level 1 of the fair value hierarchy. Swaps are priced using third-party broker quotes, industry pricing services, and exchange-traded curves, with appropriate consideration of counterparty credit risk, but because they have contractual terms that are not identical to exchange-traded futures instruments with a comparable market price, these financial instruments are categorized in Level 2 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 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 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 entered into for our international operations to manage our exposure to exchange rate fluctuations on transactions denominated in currencies other than the local (functional) currencies of those operations. These contracts are valued based on quoted prices from the exchange 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), Quebec's *Environmental Quality Act* (the Quebec cap-and-trade system), and Ontario's *Climate Change Mitigation and Low-Carbon Economy Act* (the Ontario cap-and-trade system), (collectively, the cap-and-trade systems). To the degree we are unable to blend biofuels (such as ethanol and biodiesel) at percentages required under the biofuel programs, we must purchase biofuel credits to comply with these programs. Under the cap-and-trade systems, we must purchase emission credits to comply with these systems. These programs are further described in Note 14 under "Environmental Compliance Program Price Risk." The liability for environmental credits is based on our deficit for such credits as of the balance sheet date, if any, after considering any credits acquired or under contract, and is equal to the product of the credits deficit and the market price of these credits as of the balance sheet date. The environmental credit obligations are categorized in Level 2 of the fair value hierarchy and are measured at fair value using the market approach based on quoted prices from an independent pricing service.

There were no transfers between levels for assets and liabilities held as of June 30, 2018 and December 31, 2017 that were measured at fair value on a recurring basis.

There was no significant activity during the three and six months ended June 30, 2018 and 2017 related to the fair value amounts categorized in Level 3 as of June 30, 2018 and December 31, 2017.

Nonrecurring Fair Value Measurements

There were no assets or liabilities that were measured at fair value on a nonrecurring basis as of June 30, 2018 and December 31, 2017.

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):

		June 30, 2018		December 31, 2017	
	Fair Value Hierarchy	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Financial assets:					
Cash and cash equivalents	Level 1	\$ 4,451	\$ 4,451	\$ 5,850	\$ 5,850
Financial liabilities:					
Debt (excluding capital leases)	Level 2	8,451	9,310	8,310	9,795

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

14. PRICE RISK MANAGEMENT ACTIVITIES

We are exposed to market risks primarily related to the volatility in the price of commodities, and 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 13), as summarized below under *“Fair Values of Derivative Instruments,”* with changes in fair value recognized currently in income. The effect of these derivative instruments on our income is summarized below under *“Effect of Derivative Instruments on Income.”*

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), grain (primarily corn), soybean oil, 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, swaps, and options. We use the futures markets for the available liquidity, which provides greater flexibility in transacting our hedging and trading operations. We use swaps primarily to manage our price exposure. 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.

To manage commodity price risk, we use economic hedges, which are not designated as fair value or cash flow hedges, and we use fair value and cash flow hedges from time to time. We also enter into certain commodity derivative instruments for trading purposes. Our objectives for entering into hedges or trading derivatives are described below.

- *Economic Hedges* – Economic hedges represent commodity derivative instruments that are used to manage price volatility in certain (i) feedstock and refined petroleum product inventories, (ii) fixed-price purchase contracts, and (iii) forecasted feedstock, refined petroleum product or natural gas purchases and refined petroleum product sales. The objectives of our economic hedges are to hedge price volatility in certain feedstock and refined petroleum product inventories and to lock in the price of forecasted feedstock, refined petroleum product, or natural gas purchases or refined petroleum product sales at existing market prices that we deem favorable. Economic hedges are not designated as fair value or cash flow hedges for accounting purposes, usually due to the difficulty of establishing the required documentation at the date the derivative instrument is entered into for them to qualify as hedging instruments for accounting purposes.

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

As of June 30, 2018, we had the following outstanding commodity derivative instruments that were used as 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 those identified as corn contracts that are presented in thousands of bushels and soybean oil contracts that are presented in thousands of pounds).

Derivative Instrument	Notional Contract Volumes by Year of Maturity	
	2018	2019
Crude oil and refined petroleum products:		
Swaps – long	9,892	135
Swaps – short	10,115	—
Futures – long	93,569	—
Futures – short	95,354	6
Corn:		
Futures – long	48,500	150
Futures – short	86,310	8,415
Physical contracts – long	41,029	8,264
Soybean oil:		
Futures – long	65,519	—
Futures – short	169,018	—

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

- *Trading Derivatives* – Our objective for entering into commodity derivative instruments for trading purposes is to take advantage of existing market conditions for crude oil and refined petroleum products.

As of June 30, 2018, we had the following outstanding commodity derivative instruments that were entered into for trading purposes. The information presents the notional volume of outstanding contracts by type of instrument and year of maturity (volumes in thousands of barrels, except those identified as corn contracts that are presented in thousands of bushels).

Derivative Instrument	Notional Contract Volumes by Year of Maturity	
	2018	2019
Crude oil and refined petroleum products:		
Swaps – long	300	—
Swaps – short	300	—
Futures – long	55,504	7,701
Futures – short	55,402	7,751
Options – long	75,800	—
Options – short	75,400	—
Corn:		
Futures – long	150	—

We had no commodity derivative contracts outstanding as of June 30, 2018 and 2017 or during the three and six months ended June 30, 2018 and 2017 that were designated as fair value or cash flow hedges.

Foreign Currency Risk

We are exposed to exchange rate fluctuations on transactions entered into by our international operations that are denominated in currencies other than the local (functional) currencies of those operations. To manage our exposure to these exchange rate fluctuations, we use foreign currency exchange and purchase contracts. These contracts are not designated as hedging instruments for accounting purposes and therefore are classified as economic hedges. As of June 30, 2018, we had forward contracts to purchase \$487 million of U.S. dollars. All of these commitments matured on or before July 31, 2018.

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 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

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

favorable. The cost of meeting our obligations under these compliance programs was \$131 million and \$255 million for the three months ended June 30, 2018 and 2017, respectively, and \$337 million and \$401 million for the six months ended June 30, 2018 and 2017, 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 13. 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 six months ended June 30, 2018 and 2017 and expect to continue to recover the majority of these costs in the future. For the three and six months ended June 30, 2018 and 2017, 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 June 30, 2018 and December 31, 2017 (in millions) and the line items in the balance sheets in which the fair values are reflected. See Note 13 for additional information related to the fair values of our derivative instruments.

As indicated in Note 13, we net fair value amounts recognized for multiple similar derivative contracts executed with the same counterparty under master netting arrangements, including cash collateral assets and obligations. The following tables, however, are presented on a gross asset and gross liability basis, which results in the reflection of certain assets in liability accounts and certain liabilities in asset accounts.

	Balance Sheet Location	June 30, 2018	
		Asset Derivatives	Liability Derivatives
Derivatives not designated as hedging instruments			
Commodity contracts:			
Futures	Receivables, net	\$ 1,398	\$ 1,426
Swaps	Receivables, net	11	11
Swaps	Accounts payable	—	1
Options	Receivables, net	27	29
Physical purchase contracts	Inventories	—	13
Foreign currency contracts	Receivables, net	2	—
Total		\$ 1,438	\$ 1,480

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

	Balance Sheet Location	December 31, 2017	
		Asset Derivatives	Liability Derivatives
Derivatives not designated as hedging instruments			
Commodity contracts:			
Futures	Receivables, net	\$ 875	\$ 955
Swaps	Receivables, net	11	11
Options	Receivables, net	8	3
Physical purchase contracts	Inventories	—	6
Foreign currency contracts	Accrued expenses	—	7
Total		\$ 894	\$ 982

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

The following tables provide information about the gain or loss recognized in income on our derivative instruments and the line items in the statements of income in which such gains and losses are reflected (in millions).

Derivatives Designated as Economic Hedges	Location of Gain (Loss) Recognized in Income on Derivatives	Three Months Ended June 30,		Six Months Ended June 30,	
		2018	2017	2018	2017
Commodity contracts	Cost of materials and other	\$ (66)	\$ 25	\$ (114)	\$ (72)
Foreign currency contracts	Cost of materials and other	17	(20)	14	(26)

Trading Derivatives	Location of Gain (Loss) Recognized in Income on Derivatives	Three Months Ended June 30,		Six Months Ended June 30,	
		2018	2017	2018	2017
Commodity contracts	Cost of materials and other	\$ 51	\$ (3)	\$ 87	\$ (2)

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,” and similar expressions.

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

- future refining segment margins, including gasoline and distillate 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;
- our anticipated level of capital investments, including deferred costs for refinery turnarounds and catalyst, capital expenditures for environmental and other purposes, and joint venture investments, and the effect of those capital investments on our results of operations;
- anticipated trends in the supply of and demand for crude oil and other feedstocks and refined petroleum 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, ethanol, and midstream industry fundamentals.

We based our forward-looking statements on our current expectations, estimates, and projections about ourselves and our industry. We caution that these statements are not guarantees of future performance 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, our actual results may differ materially from the future performance that we have expressed or forecast in the forward-looking statements. Differences between actual results and any future performance suggested in these forward-looking statements could result from a variety of factors, including the following:

- 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;
- demand for, and supplies of, refined petroleum products such as gasoline, diesel, jet fuel, petrochemicals, and ethanol;
- demand for, and supplies of, crude oil and other feedstocks;
- the ability of the members of the Organization of Petroleum Exporting Countries 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, or other catastrophes affecting our refineries, machinery, pipelines, equipment, and information systems, or those of our suppliers or customers;
- changes in the cost or availability of transportation for feedstocks and refined petroleum products;
- the price, availability, and acceptance of alternative fuels and alternative-fuel vehicles;
- the levels of government subsidies for alternative fuels;
- 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, and refined petroleum products 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 (also known as AB 32), the Quebec cap-and-trade system, the Ontario cap-and-trade system, and the U.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;
- 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, 2017 that is incorporated by reference herein.

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.

This Form 10-Q includes references to financial measures that are not defined under U.S. GAAP. These non-GAAP financial measures include adjusted net income attributable to Valero stockholders, refining and ethanol segment margin, and adjusted operating income. We have included these non-GAAP financial measures to help facilitate the comparison of operating results between periods. See the accompanying financial tables in "RESULTS OF OPERATIONS" and note (g) to the accompanying tables for reconciliations of these non-GAAP financial measures to the most directly comparable U.S. GAAP financial

measures. Also in note (g), we disclose the reasons why we believe our use of the non-GAAP financial measures provides useful information.

OVERVIEW AND OUTLOOK

Overview

Second Quarter Results

For the second quarter of 2018, we reported net income attributable to Valero stockholders of \$845 million compared to \$548 million for the second quarter of 2017, which represents an increase of \$297 million. Excluding the adjustments to net income attributable to Valero stockholders reflected in the table on page 40, adjusted net income attributable to Valero stockholders was \$928 million for the second quarter of 2018, an increase of \$380 million compared to the second quarter of 2017. This increase is primarily due to higher operating income between the periods, net of the resulting increase in income tax expense.

Operating income was \$1.3 billion for the second quarter of 2018 compared to \$860 million for the second quarter of 2017, which represents an increase of \$393 million. Excluding the adjustments to operating income reflected in the table on page 40, adjusted operating income for the second quarter of 2018 was \$1.3 billion, an increase of \$470 million compared to the second quarter of 2017.

The \$470 million increase in adjusted operating income is primarily due to the following:

- *Refining segment.* Refining segment adjusted operating income increased by \$463 million primarily due to improved distillate margins and stronger crude oil discounts, partially offset by lower gasoline margins and lower throughput volumes. This is more fully described on pages 44 through 46.
- *Ethanol segment.* Ethanol segment operating income increased by \$12 million primarily due to higher corn related co-product prices, partially offset by lower ethanol prices. This is more fully described on page 46.
- *VLP segment.* VLP segment operating income increased by \$12 million primarily due to incremental revenues, partially offset by higher cost of sales, generated from transportation and terminaling activities associated with a terminal and a product pipeline system acquired by VLP in November 2017 that were formerly a part of the refining segment. This is more fully described on page 47.
- *Corporate and eliminations.* Adjusted corporate and eliminations increased by \$17 million primarily due to an increase in employee related expenses. This is more fully described on page 47.

First Six Months Results

For the first six months of 2018, we reported net income attributable to Valero stockholders of \$1.3 billion compared to \$853 million for the first six months of 2017, which represents an increase of \$461 million. Excluding the adjustments to net income attributable to Valero stockholders reflected in the table on page 50, adjusted net income attributable to Valero stockholders was \$1.4 billion for the first six months of 2018, an increase of \$506 million compared to the first six months of 2017. This increase is primarily due to higher operating income between the periods, net of the resulting increase in income tax expense.

Operating income was \$2.1 billion for the first six months of 2018 compared to \$1.4 billion for the first six months of 2017, which represents an increase of \$666 million. Excluding the adjustments to operating income

reflected in the table on page 50 , adjusted operating income for the first six months of 2018 was \$2.0 billion , an increase of \$635 million compared to the first six months of 2017 .

The \$635 million increase in adjusted operating income is primarily due to the following:

- *Refining segment.* Refining segment adjusted operating income increased by \$585 million primarily due to improved distillate margins and stronger discounts on crude oils and other feedstocks, partially offset by lower gasoline and other products margins. This is more fully described on pages 56 through 58 .
- *Ethanol segment.* Ethanol segment operating income increased by \$35 million primarily due to higher corn related co-product prices, partially offset by lower ethanol prices. This is more fully described on pages 58 and 59 .
- *VLP segment.* VLP segment operating income increased by \$26 million primarily due to incremental revenues, partially offset by higher cost of sales, generated from transportation and terminaling activities associated with a terminal and a product pipeline system acquired by VLP in November 2017 that were formerly a part of the refining segment. This is more fully described on page 59 .
- *Corporate and eliminations.* Adjusted corporate and eliminations increased by \$11 million primarily due to an increase in employee related expenses. This is more fully described on page 59 .

Outlook

Below are several factors that have impacted or may impact our results of operations during the third quarter of 2018 :

- Refined product margins are expected to remain near current levels as domestic and export demand remains strong.
- Medium and heavy sour crude oil discounts are expected to remain weaker than their five-year averages as supplies of sour crude oils available in the market remain suppressed.
- Sweet crude oil discounts are expected to remain near current levels as export demand remains strong and increased supplies from the Permian Basin are delivered into U.S. Gulf Coast markets.
- Ethanol margins are expected to remain near current levels.

RESULTS OF OPERATIONS

The following tables highlight our results of operations, our operating performance, and market reference prices that directly impact our operations. In addition, these tables include financial measures that are not defined under U.S. GAAP and represent non-GAAP financial measures. These non-GAAP financial measures are reconciled to their most comparable U.S. GAAP financial measures and include adjusted net income attributable to Valero Energy Corporation stockholders, adjusted operating income, and refining and ethanol segment margin. In note (g) to these tables, we disclose the reasons why we believe our use of non-GAAP financial measures provides useful information.

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

	Three Months Ended June 30, 2018				
	Refining	Ethanol	VLP	Corporate and Eliminations	Total
Revenues:					
Revenues from external customers	\$ 30,130	\$ 884	\$ —	\$ 1	\$ 31,015
Intersegment revenues	1	42	135	(178)	—
Total revenues	30,131	926	135	(177)	31,015
Cost of sales:					
Cost of materials and other	27,283	754	—	(177)	27,860
Operating expenses (excluding depreciation and amortization expense reflected below)	969	109	33	(1)	1,110
Depreciation and amortization expense	471	20	19	—	510
Total cost of sales	28,723	883	52	(178)	29,480
Other operating expenses (c)	21	—	—	—	21
General and administrative expenses (excluding depreciation and amortization expense reflected below) (d)	—	—	—	248	248
Depreciation and amortization expense	—	—	—	13	13
Operating income by segment	\$ 1,387	\$ 43	\$ 83	\$ (260)	1,253
Other income (expense), net (e)					(5)
Interest and debt expense, net of capitalized interest					(124)
Income before income tax expense					1,124
Income tax expense (f)					249
Net income					875
Less: Net income attributable to noncontrolling interests					30
Net income attributable to Valero Energy Corporation stockholders					\$ 845

See note references on pages 54 through 56 .

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

	Three Months Ended June 30, 2017				
	Refining	Ethanol	VLP	Corporate and Eliminations	Total
Revenues:					
Revenues from external customers	\$ 21,415	\$ 839	\$ —	\$ —	\$ 22,254
Intersegment revenues	—	28	110	(138)	—
Total revenues	21,415	867	110	(138)	22,254
Cost of sales:					
Cost of materials and other	19,037	710	—	(138)	19,609
Operating expenses (excluding depreciation and amortization expense reflected below) (b)	979	107	27	(2)	1,111
Depreciation and amortization expense	454	19	12	—	485
Total cost of sales	20,470	836	39	(140)	21,205
General and administrative expenses (excluding depreciation and amortization expense reflected below) (b)	—	—	—	175	175
Depreciation and amortization expense	—	—	—	14	14
Operating income by segment	\$ 945	\$ 31	\$ 71	\$ (187)	860
Other income, net (b)					27
Interest and debt expense, net of capitalized interest					(119)
Income before income tax expense					768
Income tax expense					196
Net income					572
Less: Net income attributable to noncontrolling interests					24
Net income attributable to Valero Energy Corporation stockholders					\$ 548

See note references on pages 54 through 56 .

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

	Three Months Ended June 30,	
	2018	2017
Reconciliation of net income attributable to Valero Energy Corporation stockholders to adjusted net income attributable to Valero Energy Corporation stockholders (g)		
Net income attributable to Valero Energy Corporation stockholders	\$ 845	\$ 548
Exclude adjustments:		
Texas City Refinery fire expenses (c)	(14)	—
Income tax benefit related to Texas City Refinery fire expenses	3	—
Texas City Refinery fire expenses, net of taxes	(11)	—
Environmental reserve adjustment (d)	(56)	—
Income tax benefit related to the environmental reserve adjustment	13	—
Environmental reserve adjustment, net of taxes	(43)	—
Loss on early redemption of debt (e)	(38)	—
Income tax benefit related to the loss on early redemption of debt	9	—
Loss on early redemption of debt, net of taxes	(29)	—
Total adjustments	(83)	—
Adjusted net income attributable to Valero Energy Corporation stockholders	\$ 928	\$ 548

	Three Months Ended June 30, 2018				
	Refining	Ethanol	VLP	Corporate and Eliminations	Total
Reconciliation of operating income to adjusted operating income (g)					
Operating income by segment (see page 38)	\$ 1,387	\$ 43	\$ 83	\$ (260)	\$ 1,253
Exclude:					
Other operating expenses (c)	(21)	—	—	—	(21)
Environmental reserve adjustment (d)	—	—	—	(56)	(56)
Adjusted operating income	\$ 1,408	\$ 43	\$ 83	\$ (204)	\$ 1,330

There were no adjustments to operating income for the second quarter of 2017 . See operating income by segment for the second quarter of 2017 on page 39.

See note references on pages 54 through 56 .

**Second Quarter Results -
Refining Segment Operating Highlights**
(millions of dollars, except per barrel amounts)

	Three Months Ended June 30,		
	2018	2017	Change
Throughput volumes (thousand barrels per day (BPD))			
Feedstocks:			
Heavy sour crude oil	482	517	(35)
Medium/light sour crude oil	434	508	(74)
Sweet crude oil	1,303	1,308	(5)
Residuals	231	228	3
Other feedstocks	121	142	(21)
Total feedstocks	2,571	2,703	(132)
Blendstocks and other	327	316	11
Total throughput volumes	2,898	3,019	(121)
Yields (thousand BPD)			
Gasolines and blendstocks	1,407	1,458	(51)
Distillates	1,096	1,167	(71)
Other products (h)	434	434	—
Total yields	2,937	3,059	(122)
Operating statistics (i)			
Refining margin (g)	\$ 2,848	\$ 2,378	\$ 470
Adjusted refining operating income (see page 40) (g)	\$ 1,408	\$ 945	\$ 463
Throughput volumes (thousand BPD)	2,898	3,019	(121)
Refining margin per barrel of throughput	\$ 10.80	\$ 8.66	\$ 2.14
Less:			
Operating expenses (excluding depreciation and amortization expense reflected below) per barrel of throughput (b)	3.67	3.56	0.11
Depreciation and amortization expense per barrel of throughput	1.79	1.66	0.13
Adjusted refining operating income per barrel of throughput	\$ 5.34	\$ 3.44	\$ 1.90

See note references on pages 54 through 56 .

**Second Quarter Results -
Ethanol Segment Operating Highlights**
(millions of dollars, except per gallon amounts)

	Three Months Ended June 30,		
	2018	2017	Change
Operating statistics (i)			
Ethanol margin (g)	\$ 172	\$ 157	\$ 15
Ethanol operating income	\$ 43	\$ 31	\$ 12
Production volumes (thousand gallons per day)	4,002	3,775	227
Ethanol margin per gallon of production	\$ 0.47	\$ 0.46	\$ 0.01
Less:			
Operating expenses (excluding depreciation and amortization expense reflected below) per gallon of production	0.30	0.31	(0.01)
Depreciation and amortization expense per gallon of production	0.05	0.06	(0.01)
Ethanol operating income per gallon of production	\$ 0.12	\$ 0.09	\$ 0.03

**Second Quarter Results -
VLP Segment Operating Highlights**
(millions of dollars, except per barrel amounts)

	Three Months Ended June 30,		
	2018	2017	Change
Operating statistics (i)			
Pipeline transportation revenue	\$ 31	\$ 25	\$ 6
Terminaling revenue	103	84	19
Storage and other revenue	1	1	—
Total VLP revenues	\$ 135	\$ 110	\$ 25
Pipeline transportation throughput (thousand BPD)	1,033	1,003	30
Pipeline transportation revenue per barrel of throughput	\$ 0.32	\$ 0.27	\$ 0.05
Terminaling throughput (thousand BPD)	3,562	2,853	709
Terminaling revenue per barrel of throughput	\$ 0.32	\$ 0.33	\$ (0.01)

See note references on pages 54 through 56 .

Second Quarter Results -
Average Market Reference Prices and Differentials
(dollars per barrel, except as noted)

	Three Months Ended June 30,		
	2018	2017	Change
Feedstocks (dollars per barrel)			
Brent crude oil	\$ 74.93	\$ 50.91	\$ 24.02
Brent less West Texas Intermediate (WTI) crude oil	6.93	2.67	4.26
Brent less Alaska North Slope (ANS) crude oil	0.83	0.22	0.61
Brent less Louisiana Light Sweet (LLS) crude oil	1.93	0.60	1.33
Brent less Argus Sour Crude Index (ASCI) crude oil	5.63	3.94	1.69
Brent less Maya crude oil	12.90	7.03	5.87
LLS crude oil	73.00	50.31	22.69
LLS less ASCI crude oil	3.70	3.34	0.36
LLS less Maya crude oil	10.97	6.43	4.54
WTI crude oil	68.00	48.24	19.76
Natural gas (dollars per million British Thermal Units (MMBtu))			
	2.89	3.14	(0.25)
Products (dollars per barrel, unless otherwise noted)			
U.S. Gulf Coast:			
Conventional Blendstock of Oxygenate Blending (CBOB) gasoline less Brent	7.47	10.38	(2.91)
Ultra-low-sulfur diesel less Brent	13.46	10.99	2.47
Propylene less Brent	(6.54)	0.04	(6.58)
CBOB gasoline less LLS	9.40	10.98	(1.58)
Ultra-low-sulfur diesel less LLS	15.39	11.59	3.80
Propylene less LLS	(4.61)	0.64	(5.25)
U.S. Mid-Continent:			
CBOB gasoline less WTI	16.05	14.16	1.89
Ultra-low-sulfur diesel less WTI	22.02	14.60	7.42
North Atlantic:			
CBOB gasoline less Brent	10.37	12.57	(2.20)
Ultra-low-sulfur diesel less Brent	15.25	12.21	3.04
U.S. West Coast:			
California Reformulated Gasoline Blendstock of Oxygenate Blending (CARBOB) 87 gasoline less ANS	18.36	23.01	(4.65)
CARB diesel less ANS	18.70	14.32	4.38
CARBOB 87 gasoline less WTI	24.46	25.46	(1.00)
CARB diesel less WTI	24.80	16.77	8.03
New York Harbor corn crush (dollars per gallon)	0.17	0.26	(0.09)

Total Company, Corporate, and Other

Revenues increased \$8.8 billion in the second quarter of 2018 compared to the second quarter of 2017 primarily due to increases in refined petroleum product prices associated with our refining segment. This improvement in revenues was partially offset by higher cost of sales and general and administrative expenses (excluding depreciation and amortization expense) between the periods, resulting in an increase in operating income of \$393 million in the second quarter of 2018 compared to the second quarter of 2017 .

Excluding the adjustments to operating income for the second quarter of 2018 reflected in the table on page 40 , adjusted operating income was \$1.3 billion for the second quarter of 2018 compared to \$860 million for the second quarter of 2017 . Details regarding the \$470 million increase in adjusted operating income between the periods are discussed by segment below.

Other income (expense), net decreased \$32 million in the second quarter of 2018 compared to the second quarter of 2017 primarily due to a \$38 million charge from the early redemption of debt, as more fully described in note (e) to the accompanying tables (see page 54), partially offset by higher equity in earnings associated with our Diamond Pipeline joint venture.

Income tax expense increased \$53 million in the second quarter of 2018 compared to the second quarter of 2017 primarily as a result of higher income before income tax expense, partially offset by a decrease in our effective tax rate. Our effective tax rate was 22 percent for the second quarter of 2018 compared to 26 percent for the second quarter of 2017 . The lower effective tax rate for the second quarter of 2018 is primarily due to the reduction in the U.S. statutory income tax rate from 35 percent to 21 percent effective January 1, 2018 as a result of Tax Reform, which is more fully described in Note 9 of Condensed Notes to Consolidated Financial Statements.

Refining Segment Results

Refining segment revenues increased \$8.7 billion in the second quarter of 2018 compared to the second quarter of 2017 primarily due to increases in refined petroleum product prices. This improvement in refining segment revenues was partially offset by higher cost of sales between the periods, resulting in an increase in refining segment operating income of \$442 million in the second quarter of 2018 compared to the second quarter of 2017 .

Excluding the adjustments to refining segment operating income from the second quarter of 2018 reflected in the table on page 40 , adjusted refining segment operating income was \$1.4 billion for the second quarter of 2018 , an increase of \$463 million compared to the second quarter of 2017 . This increase is primarily due to higher refining segment margin, as outlined below.

Refining segment margin, as defined in note (g) to the accompanying tables (see page 54), increased \$470 million in the second quarter of 2018 compared to the second quarter of 2017 , primarily due to the following:

- *Increase in distillate margins.* We experienced improved distillate margins throughout all of our regions during the second quarter of 2018 compared to the second quarter of 2017 . For example, the Brent-based benchmark reference margin for U.S. Gulf Coast ultra-low-sulfur diesel was \$13.46 per barrel for the second quarter of 2018 compared to \$10.99 per barrel for the second quarter of 2017 , representing a favorable increase of \$2.47 per barrel. Another example is the WTI-based benchmark reference margin for U.S. Mid-Continent ultra-low-sulfur diesel which was \$22.02 per barrel for the second quarter of 2018 compared to \$14.60 per barrel for the second quarter of 2017 , representing a favorable increase of \$7.42 per barrel. We estimate that the increase in distillate

margins per barrel in the second quarter of 2018 compared to the second quarter of 2017 had a favorable impact to our refining segment margin of approximately \$413 million.

- *Higher discounts on crude oils.* The market prices for refined petroleum products generally track the price of Brent crude oil, which is a benchmark crude oil, and we benefit when we process crude oils that are priced at a discount to Brent crude oil. We benefitted from processing these types of crude oils during the second quarter of 2018 and that benefit improved compared to the second quarter of 2017. For example, Maya crude oil, a sour crude oil processed in our U.S. Gulf Coast region, sold at a discount to Brent crude oil of \$12.90 per barrel for the second quarter of 2018 compared to a discount of \$7.03 per barrel for the second quarter of 2017, representing a favorable increase of \$5.87 per barrel. Another example is WTI crude oil, a light sweet crude oil processed in our U.S. Mid-Continent region, which sold at a discount of \$6.93 per barrel for the second quarter of 2018 compared to a discount of \$2.67 per barrel for the second quarter of 2017, representing a favorable increase of \$4.26 per barrel. We estimate that the increase in the discounts for the crude oils we processed during the second quarter of 2018 compared to the second quarter of 2017 had a favorable impact to our refining segment margin of approximately \$325 million.
- *Higher discounts on other feedstocks.* In addition to crude oil, we utilize other feedstocks, such as natural gas and residuals, in certain of our refining processes. We benefit when we process these other feedstocks that are priced at a discount to Brent crude oil. We benefitted from processing these types of feedstocks during the second quarter of 2018 and that benefit improved compared to the second quarter of 2017. We estimate that the increase in the discounts for the other feedstocks we processed during the second quarter of 2018 compared to the second quarter of 2017 had a favorable impact to our refining segment margin of approximately \$181 million.
- *Lower costs of biofuel credits.* As more fully described in Note 14 of Condensed Notes to Consolidated Financial Statements, we must purchase biofuel credits in order to meet our biofuel blending obligation under various government and regulatory compliance programs, and the cost of these credits (primarily RINs in the U.S.) decreased by \$124 million to \$131 million for the second quarter of 2018 compared to \$255 million for the second quarter of 2017.
- *Decrease in other products margins.* We experienced a decrease in the margins of other products (such as petroleum coke and sulfur) relative to Brent crude oil during the second quarter of 2018 compared to the second quarter of 2017 due to an increase in the cost of crude oils between the periods. Because the market prices for our other products remain relatively stable, our margins decline when the cost of crude oils that we process increases. For example, the benchmark price of Brent crude oil was \$74.93 per barrel for the second quarter of 2018 compared to \$50.91 per barrel for the second quarter of 2017, representing an unfavorable increase of \$24.02 per barrel. We estimate that the decrease in other products margins in the second quarter of 2018 compared to the second quarter of 2017 had an unfavorable impact to our refining segment margin of approximately \$259 million.
- *Decrease in gasoline margins.* We experienced a decrease in gasoline margins during the second quarter of 2018 compared to the second quarter of 2017. For example, the Brent-based benchmark reference margin for U.S. Gulf Coast CBOB gasoline was \$7.47 per barrel for the second quarter of 2018 compared to \$10.38 per barrel for the second quarter of 2017, representing an unfavorable decrease of \$2.91 per barrel. Another example is the ANS-based benchmark reference margin for U.S. West Coast CARBOB 87 gasoline which was \$18.36 per barrel for the second quarter of 2018 compared to \$23.01 per barrel for the second quarter of 2017, representing an unfavorable decrease

of \$4.65 per barrel. We estimate that the decrease in gasoline margins per barrel in the second quarter of 2018 compared to the second quarter of 2017 had an unfavorable impact to our refining segment margin of approximately \$133 million.

- *Lower throughput volumes.* Refining throughput volumes decreased by 121,000 BPD in the second quarter of 2018 primarily due to maintenance in the U.S. Gulf Coast and North Atlantic regions. We estimate that the decrease in refining throughput volumes had a negative impact on our refining segment margin of approximately \$119 million.
- *Increase in charges from VLP.* Charges from the VLP segment for transportation and terminaling services increased \$25 million in the second quarter of 2018 compared to the second quarter of 2017 primarily due to additional services provided by a terminal and a product pipeline system acquired by VLP in November 2017 that were formerly a part of the refining segment. The increase in charges from the VLP segment is more fully discussed in the VLP segment analysis below.

Ethanol Segment Results

Ethanol segment revenues increased \$59 million in the second quarter of 2018 compared to the second quarter of 2017 primarily due to increases in corn related co-product prices. This improvement in ethanol segment revenues was partially offset by higher cost of sales between the periods, resulting in an increase in ethanol segment operating income of \$12 million in the second quarter of 2018 compared to the second quarter of 2017. This increase is primarily due to higher ethanol segment margins, as outlined below.

Ethanol segment margin, as defined in note (g) to the accompanying tables (see page 54), increased \$15 million in the second quarter of 2018 compared to the second quarter of 2017, primarily due to the following:

- *Higher co-product prices.* An increase in export demand for corn related co-products, primarily distillers grains, had a favorable effect on the prices we received. We estimate that the increase in corn related co-product prices had a favorable impact to our ethanol segment margin of approximately \$41 million.
- *Higher production volumes.* Ethanol segment margin was favorably impacted by increased production volumes of 227,000 gallons per day in the second quarter of 2018 compared to the second quarter of 2017 primarily due to reliability improvements. We estimate that the increase in production volumes had a favorable impact to our ethanol segment margin of approximately \$9 million.
- *Lower ethanol prices.* Ethanol prices were lower in the second quarter of 2018 compared to the second quarter of 2017 primarily due to a decrease in both export and domestic demand. For example, the New York Harbor ethanol price was \$1.56 per gallon for the second quarter of 2018 compared to \$1.59 per gallon for the second quarter of 2017, representing an unfavorable decrease of \$0.03 per gallon. We estimate that the decrease in the price of ethanol had an unfavorable impact to our ethanol segment margin of approximately \$25 million.
- *Higher corn prices.* Corn prices were higher in the second quarter of 2018 compared to the second quarter of 2017. For example, the Chicago Board of Trade (CBOT) corn price was \$3.83 per bushel for the second quarter of 2018 compared to \$3.68 per bushel for the second quarter of 2017, representing an unfavorable increase of \$0.15 per bushel. We estimate that the increase in the price of corn had an unfavorable impact to our ethanol segment margin of approximately \$10 million.

VLP Segment Results

VLP segment revenues increased \$25 million in the second quarter of 2018 compared to the second quarter of 2017 primarily due to incremental revenues generated from transportation and terminaling services associated with assets acquired by VLP in November 2017 that were formerly a part of the refining segment. This increase in VLP segment revenues was partially offset by increases in other components of cost of sales, resulting in an increase in VLP segment operating income of \$12 million in the second quarter of 2018 compared to the second quarter of 2017. The components of this increase, along with the reasons for the changes in these components, are discussed below.

VLP segment revenues increased \$25 million in the second quarter of 2018, as previously noted, primarily due to incremental transportation and terminaling revenues from the Port Arthur terminal and Parkway pipeline, which VLP acquired from Valero in November 2017. The incremental revenues generated by these assets had a favorable impact to VLP segment revenues of \$22 million.

VLP segment cost of sales increased \$13 million primarily due to the costs to operate the Port Arthur terminal and the Parkway pipeline and depreciation expense associated with these assets. VLP acquired these assets in November 2017.

Corporate and Eliminations

Corporate and eliminations, which consists primarily of general and administrative expenses and related depreciation and amortization expense, increased by \$73 million in the second quarter of 2018 compared to the second quarter of 2017. Excluding the environmental reserve adjustment of \$56 million for the second quarter of 2018 reflected in the table on page 40, adjusted corporate and eliminations increased by \$17 million primarily due to an increase in employee-related expenses.

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

	Six Months Ended June 30, 2018				
	Refining	Ethanol	VLP	Corporate and Eliminations	Total Company
Revenues:					
Revenues from external customers	\$ 55,691	\$ 1,761	\$ —	\$ 2	\$ 57,454
Intersegment revenues	5	88	267	(360)	—
Total revenues	55,696	1,849	267	(358)	57,454
Cost of sales:					
Cost of materials and other (a)	50,471	1,503	—	(358)	51,616
Operating expenses (excluding depreciation and amortization expense reflected below)	1,966	220	62	(2)	2,246
Depreciation and amortization expense	919	38	38	—	995
Total cost of sales	53,356	1,761	100	(360)	54,857
Other operating expenses (c)	31	—	—	—	31
General and administrative expenses (excluding depreciation and amortization expense reflected below) (d)	—	—	—	486	486
Depreciation and amortization expense	—	—	—	26	26
Operating income by segment	\$ 2,309	\$ 88	\$ 167	\$ (510)	2,054
Other income, net (e)					46
Interest and debt expense, net of capitalized interest					(245)
Income before income tax expense					1,855
Income tax expense (f)					398
Net income					1,457
Less: Net income attributable to noncontrolling interests (a)					143
Net income attributable to Valero Energy Corporation stockholders					\$ 1,314

See note references on pages 54 through 56 .

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

	Six Months Ended June 30, 2017				
	Refining	Ethanol	VLP	Corporate and Eliminations	Total Company
Revenues:					
Revenues from external customers	\$ 42,302	\$ 1,724	\$ —	\$ —	\$ 44,026
Intersegment revenues	—	88	216	(304)	—
Total revenues	42,302	1,812	216	(304)	44,026
Cost of sales:					
Cost of materials and other	37,844	1,497	—	(304)	39,037
Operating expenses (excluding depreciation and amortization expense reflected below) (b)	1,970	216	51	(2)	2,235
Depreciation and amortization expense	903	46	24	—	973
Total cost of sales	40,717	1,759	75	(306)	42,245
General and administrative expenses (excluding depreciation and amortization expense reflected below) (b)	—	—	—	367	367
Depreciation and amortization expense	—	—	—	26	26
Operating income by segment	\$ 1,585	\$ 53	\$ 141	\$ (391)	1,388
Other income, net (b)					53
Interest and debt expense, net of capitalized interest					(240)
Income before income tax expense					1,201
Income tax expense					308
Net income					893
Less: Net income attributable to noncontrolling interests					40
Net income attributable to Valero Energy Corporation stockholders					\$ 853

See note references on pages 54 through 56 .

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

	Six Months Ended June 30,	
	2018	2017
Reconciliation of net income attributable to Valero Energy Corporation stockholders to adjusted net income attributable to Valero Energy Corporation stockholders (g)		
Net income attributable to Valero Energy Corporation stockholders	\$ 1,314	\$ 853
Exclude adjustments:		
Blender's tax credit attributable to Valero Energy Corporation shareholders (a)	90	—
Income tax expense related to the blender's tax credit	(11)	—
Blender's tax credit attributable to Valero Energy Corporation stockholders, net of taxes	79	—
Texas City Refinery fire expenses (c)	(14)	—
Income tax benefit related to Texas City Refinery fire expenses	3	—
Texas City Refinery fire expenses, net of taxes	(11)	—
Environmental reserve adjustment (d)	(108)	—
Income tax benefit related to the environmental reserve adjustment	24	—
Environmental reserve adjustment, net of taxes	(84)	—
Loss on early redemption of debt (e)	(38)	—
Income tax benefit related to the loss on early redemption of debt	9	—
Loss on early redemption of debt, net of taxes	(29)	—
Total adjustments	(45)	—
Adjusted net income attributable to Valero Energy Corporation stockholders	\$ 1,359	\$ 853

	Six Months Ended June 30, 2018				
	Refining	Ethanol	VLP	Corporate and Eliminations	Total Company
Reconciliation of operating income to adjusted operating income (g)					
Operating income by segment (see page 48)	\$ 2,309	\$ 88	\$ 167	\$ (510)	\$ 2,054
Exclude:					
Blender's tax credit (a)	170	—	—	—	170
Other operating expenses (c)	(31)	—	—	—	(31)
Environmental reserve adjustment (d)	—	—	—	(108)	(108)
Adjusted operating income	\$ 2,170	\$ 88	\$ 167	\$ (402)	\$ 2,023

There were no adjustments to operating income for the first six months of 2017. See operating income by segment for the first six months of 2017 on page 49.

See note references on pages 54 through 56 .

**First Six Months Results -
Refining Segment Operating Highlights**
(millions of dollars, except per barrel amounts)

	Six Months Ended June 30,		
	2018	2017	Change
Throughput volumes (thousand BPD)			
Feedstocks:			
Heavy sour crude oil	482	483	(1)
Medium/light sour crude oil	421	482	(61)
Sweet crude oil	1,323	1,277	46
Residuals	226	231	(5)
Other feedstocks	121	145	(24)
Total feedstocks	2,573	2,618	(45)
Blendstocks and other	342	311	31
Total throughput volumes	2,915	2,929	(14)
Yields (thousand BPD)			
Gasolines and blendstocks	1,404	1,409	(5)
Distillates	1,102	1,129	(27)
Other products (h)	446	429	17
Total yields	2,952	2,967	(15)
Operating statistics (i)			
Refining margin (g)	\$ 5,055	\$ 4,458	\$ 597
Adjusted refining operating income (see page 50) (g)	\$ 2,170	\$ 1,585	\$ 585
Throughput volumes (thousand BPD)	2,915	2,929	(14)
Refining margin per barrel of throughput	\$ 9.58	\$ 8.41	\$ 1.17
Less:			
Operating expenses (excluding depreciation and amortization expense reflected below) per barrel of throughput (b)	3.73	3.72	0.01
Depreciation and amortization expense per barrel of throughput	1.74	1.70	0.04
Adjusted refining operating income per barrel of throughput	\$ 4.11	\$ 2.99	\$ 1.12

See note references on pages 54 through 56 .

***First Six Months Results -
Ethanol Segment Operating Highlights
(millions of dollars, except per gallon amounts)***

	Six Months Ended June 30,		
	2018	2017	Change
Operating statistics (i)			
Ethanol margin (g)	\$ 346	\$ 315	\$ 31
Ethanol operating income	\$ 88	\$ 53	\$ 35
Production volumes (thousand gallons per day)	4,057	3,908	149
Ethanol margin per gallon of production	\$ 0.47	\$ 0.45	\$ 0.02
Less:			
Operating expenses (excluding depreciation and amortization reflected below) per gallon of production	0.30	0.31	(0.01)
Depreciation and amortization expense per gallon of production	0.05	0.06	(0.01)
Ethanol operating income per gallon of production	\$ 0.12	\$ 0.08	\$ 0.04

***First Six Months Results -
VLP Segment Operating Highlights
(millions of dollars, except per barrel amounts)***

	Six Months Ended June 30,		
	2018	2017	Change
Operating statistics (i)			
Pipeline transportation revenue	62	48	\$ 14
Terminals revenue	202	167	35
Storage and other revenue	3	1	2
Total VLP revenues	\$ 267	\$ 216	\$ 51
Pipeline transportation throughput (thousand BPD)	1,047	983	64
Pipeline transportation revenue per barrel of throughput	\$ 0.33	\$ 0.27	\$ 0.06
Terminals throughput (thousand BPD)	3,479	2,794	685
Terminals revenue per barrel of throughput	\$ 0.32	\$ 0.33	\$ (0.01)

See note references on pages 54 through 56

**First Six Months Results -
Average Market Reference Prices and Differentials
(dollars per barrel, except as noted)**

	Six Months Ended June 30,		
	2018	2017	Change
Feedstocks (dollars per barrel)			
Brent crude oil	\$ 71.05	\$ 52.78	\$ 18.27
Brent less WTI crude oil	5.61	2.74	2.87
Brent less ANS crude oil	0.52	0.52	—
Brent less LLS crude oil	1.66	0.86	0.80
Brent less ASCI crude oil	5.26	4.50	0.76
Brent less Maya crude oil	11.18	8.48	2.70
LLS crude oil	69.39	51.92	17.47
LLS less ASCI crude oil	3.60	3.64	(0.04)
LLS less Maya crude oil	9.52	7.62	1.90
WTI crude oil	65.44	50.04	15.40
Natural gas (dollars per MMBtu)	3.04	3.05	(0.01)
Products (dollars per barrel, unless otherwise noted)			
U.S. Gulf Coast:			
CBOB gasoline less Brent	7.38	9.58	(2.20)
Ultra-low-sulfur diesel less Brent	13.62	11.06	2.56
Propylene less Brent	(6.68)	0.63	(7.31)
CBOB gasoline less LLS	9.04	10.44	(1.40)
Ultra-low-sulfur diesel less LLS	15.28	11.92	3.36
Propylene less LLS	(5.02)	1.49	(6.51)
U.S. Mid-Continent:			
CBOB gasoline less WTI	14.76	13.44	1.32
Ultra-low-sulfur diesel less WTI	20.93	14.30	6.63
North Atlantic:			
CBOB gasoline less Brent	9.63	10.63	(1.00)
Ultra-low-sulfur diesel less Brent	15.60	12.14	3.46
U.S. West Coast:			
CARBOB 87 gasoline less ANS	15.82	19.89	(4.07)
CARB diesel less ANS	17.99	14.58	3.41
CARBOB 87 gasoline less WTI	20.91	22.11	(1.20)
CARB diesel less WTI	23.08	16.80	6.28
New York Harbor corn crush (dollars per gallon)	0.18	0.26	(0.08)

The following notes relate to references on pages 38 through 42 and 48 through 52.

- (a) Cost of materials and other for the six months ended June 30, 2018 includes a benefit of \$170 million for the biodiesel blender's tax credit attributable to volumes blended during 2017. The benefit was recognized in February 2018 because the legislation authorizing the credit was passed and signed into law in that month. The \$170 million pre-tax benefit is included in the refining segment and includes \$80 million attributable to noncontrolling interest and \$90 million attributable to Valero Energy Corporation stockholders.
- (b) Effective January 1, 2018, we adopted the provisions of ASU No. 2017-07 which resulted in the reclassification of the non-service component of net periodic pension cost and net periodic postretirement benefit cost from operating expenses (excluding depreciation and amortization expense) and general and administrative expenses (excluding depreciation and amortization expense) to other income (expense), net. This resulted in an increase of \$14 million and \$21 million in operating expenses (excluding depreciation and amortization expense) and a decrease of \$3 million and \$1 million in general and administrative expenses (excluding depreciation and amortization expense) for the three and six months ended June 30, 2017, respectively.
- (c) Other operating expenses reflects expenses that are not associated with our cost of sales. Other operating expenses for the three and six months ended June 30, 2018 includes \$14 million of costs to respond to and assess the damage caused by a fire in the alkylation unit at our Texas City Refinery on April 19, 2018. In addition, other operating expenses for the three and six months ended June 30, 2018 includes repair costs incurred at certain of our refineries due to damage associated with inclement weather events in 2018 and Hurricane Harvey in 2017.
- (d) General and administrative expenses (excluding depreciation and amortization expense) for the three and six months ended June 30, 2018 includes a charge of \$56 million and \$108 million, respectively, for an environmental reserve adjustment associated with certain non-operating sites.
- (e) Other income (expense), net for the three and six months ended June 30, 2018 includes a \$38 million charge composed of the early redemption fee of \$37 million on our 9.375 percent Senior Notes and the write-off of \$1 million of unamortized debt issuance costs.
- (f) As a result of Tax Reform that was enacted on December 22, 2017, the U.S. statutory income tax rate was reduced from 35 percent to 21 percent. Therefore, earnings from our U.S. operations for the three and six months ended June 30, 2018 are now taxed at 21 percent, resulting in a lower effective tax rate compared to the three and six months ended June 30, 2017.
- (g) 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 through the exclusion of certain items that we believe are not indicative of our core operating performance and that may obscure our underlying business results and trends. These non-GAAP measures should not be considered as alternatives to their most comparable U.S. GAAP measures nor should they be considered in isolation or as a substitute for an analysis of our results of operations as reported under U.S. GAAP. In addition, these non-GAAP measures may not be comparable to similarly titled measures used by other companies because we may define them differently, which diminishes their utility.

Non-GAAP measures are as follows:

- **Adjusted net income attributable to Valero Energy Corporation stockholders** is defined as net income attributable to Valero Energy Corporation stockholders excluding the items noted below, along with their related income tax effect. We have excluded these items because we believe that they are not indicative of our core operating performance in 2018 and that their exclusion results in an important measure of our ongoing financial performance to better assess our underlying business results and trends. The basis for

our belief with respect to each excluded item is provided below.

- *Blender's tax credit* – The blender's tax credit is attributable to volumes blended during 2017 and is not related to 2018 activities, as described in note (a).
 - *Texas City Refinery fire expenses* – The costs incurred to respond to and assess the damage caused by the fire that occurred at the Texas City Refinery (see note (c)) are specific to that event and are not ongoing costs incurred in our operations.
 - *Environmental reserve adjustment* – The environmental reserve adjustment is attributable to sites that were shut down by prior owners and subsequently acquired by us (referred to by us as non-operating sites), as described in note (d).
 - *Loss on early redemption of debt* – The penalty and other expenses incurred in connection with the early redemption of our 9.375 percent Senior Notes (see note (e)) are not associated with the ongoing costs of our borrowing and financing activities.
- **Refining margin** is defined as refining operating income excluding the blender's tax credit (see note (a)), operating expenses (excluding depreciation and amortization expense), other operating expenses, and depreciation and amortization expense, as reflected below.
 - **Ethanol margin** is defined as ethanol operating income excluding operating expenses (excluding depreciation and amortization expense) and depreciation and amortization expense, as reflected below.

	Three Months Ended June 30,			
	2018		2017	
	Refining	Ethanol	Refining	Ethanol
Reconciliation of operating income to segment margin				
Operating income	\$ 1,387	\$ 43	\$ 945	\$ 31
Exclude:				
Operating expenses (excluding depreciation and amortization expense reflected below) (b)	(969)	(109)	(979)	(107)
Depreciation and amortization expense	(471)	(20)	(454)	(19)
Other operating expenses (c)	(21)	—	—	—
Segment margin	<u>\$ 2,848</u>	<u>\$ 172</u>	<u>\$ 2,378</u>	<u>\$ 157</u>

	Six Months Ended June 30,			
	2018		2017	
	Refining	Ethanol	Refining	Ethanol
Reconciliation of operating income to segment margin				
Operating income	\$ 2,309	\$ 88	\$ 1,585	\$ 53
Exclude:				
Blender's tax credit (a)	170	—	—	—
Operating expenses (excluding depreciation and amortization expense reflected below) (b)	(1,966)	(220)	(1,970)	(216)
Depreciation and amortization expense	(919)	(38)	(903)	(46)
Other operating expenses (c)	(31)	—	—	—
Segment margin	<u>\$ 5,055</u>	<u>\$ 346</u>	<u>\$ 4,458</u>	<u>\$ 315</u>

- **Adjusted refining operating income** is defined as refining operating income excluding the 2017 blender's tax credit received in 2018 (see note (a)) and other operating expenses.

- **Adjusted corporate and eliminations** is defined as corporate and eliminations excluding the environmental reserve adjustment associated with certain non-operating sites (see note (d)).

(h) Other products primarily include petrochemicals, gas oils, No. 6 fuel oil, petroleum coke, sulfur, and asphalt.

(i) Valero uses certain operating statistics (as noted below) to evaluate performance between comparable periods. Different companies may calculate them in different ways.

All per barrel of throughput and per gallon of production amounts are calculated by dividing the associated dollar amount by the throughput volumes, production volumes, pipeline transportation throughput volumes, or terminaling throughput volumes for the period, as applicable.

Throughput volumes, production volumes, pipeline transportation throughput volumes, and terminaling throughput volumes are calculated by multiplying throughput volumes per day, production volumes per day, pipeline transportation throughput volumes per day, and terminaling throughput volumes per day, respectively, by the number of days in the applicable period.

Total Company, Corporate, and Other

Revenues increased \$13.4 billion in the first six months of 2018 compared to the first six months of 2017 primarily due to increases in refined petroleum product prices associated with our refining segment. This improvement in revenues was partially offset by higher cost of sales and general and administrative expenses (excluding depreciation and amortization expense) between the periods, resulting in an increase in operating income of \$666 million in the first six months of 2018 compared to the first six months of 2017.

Excluding the adjustments to operating income for the first six months of 2018 reflected in the table on page 50, adjusted operating income was \$2.0 billion for the first six months of 2018 compared to \$1.4 billion for the first six months of 2017. Details regarding the \$635 million increase in adjusted operating income between the periods are discussed by segment below.

Other income (expense), net decreased \$7 million in the first six months of 2018 compared to the first six months of 2017 primarily due to a \$38 million charge from the early redemption of debt as more fully described in note (e) to the accompanying tables (see page 54), partially offset by higher equity in earnings associated with our Diamond Pipeline joint venture.

Income tax expense increased \$90 million in the first six months of 2018 compared to the first six months of 2017 primarily as a result of higher income before income tax expense, partially offset by a decrease in our effective tax rate. Our effective tax rate was 21 percent for the first six months of 2018 compared to 26 percent for the first six months of 2017. The lower effective tax rate for the first six months of 2018 is primarily due to the reduction in the U.S. statutory income tax rate from 35 percent to 21 percent effective January 1, 2018 as a result of Tax Reform, which is more fully described in Note 9 of Condensed Notes to Consolidated Financial Statements.

Net income attributable to non-controlling interests increased by \$103 million in the first six months of 2018 compared to the first six months of 2017 primarily due to a benefit of \$80 million for the blender's tax credit as more fully described in note (a) to the accompanying tables (see page 54).

Refining Segment Results

Refining segment revenues increased \$13.4 billion in the first six months of 2018 compared to the first six months of 2017 primarily due to increases in refined petroleum product prices. This improvement in refining segment revenues was partially offset by higher cost of sales between the periods, resulting in an increase

in refining segment operating income of \$724 million in the first six months of 2018 compared to the first six months of 2017 .

Excluding the adjustments to refining segment operating income for the first six months of 2018 reflected in the tables on page 50 , adjusted refining segment operating income was \$2.2 billion for the first six months of 2018 , an increase of \$585 million compared to the first six months of 2017 . The components of this increase, along with reasons for the changes in these components, are outlined below.

Refining segment margin, as defined in note (g) to the accompanying tables (see page 54), increased \$597 million in the first six months of 2018 compared to the first six months of 2017 , primarily due to the following:

- *Increase in distillate margins* . We experienced improved distillate margins throughout all our regions during the first six months of 2018 compared to the first six months of 2017 . For example, the Brent-based benchmark reference margin for U.S. Gulf Coast ultra-low-sulfur diesel was \$13.62 per barrel for the first six months of 2018 compared to \$11.06 per barrel for the first six months of 2017 , representing a favorable increase of \$2.56 per barrel. Another example is the WTI-based benchmark reference margin for U.S. Mid-Continent ultra-low-sulfur diesel, which was \$20.93 per barrel for the first six months of 2018 compared to \$14.30 per barrel for the first six months of 2017 , representing a favorable increase of \$6.63 per barrel. We estimate that the increase in distillate margins per barrel in the first six months of 2018 compared to the first six months of 2017 had a favorable impact to our refining segment margin of approximately \$817 million.
- *Higher discounts on other feedstocks* . In addition to crude oil, we utilize other feedstocks, such as natural gas and residuals, in certain of our refining processes. We benefit when we process these other feedstocks that are priced at a discount to Brent crude oil. We benefitted from processing these types of feedstocks during the first six months of 2018 and that benefit improved compared to the first six months of 2017 . We estimate that the increase in the discounts for the other feedstocks that we processed during the first six months of 2018 compared to the first six months of 2017 had a favorable impact to our refining segment margin of approximately \$160 million.
- *Lower costs of biofuel credits*. As more fully described in Note 14 of Condensed Notes to Consolidated Financial Statements, we must purchase biofuel credits in order to meet our biofuel blending obligation under various government and regulatory compliance programs, and the cost of these credits (primarily RINs in the U.S.) decreased by \$64 million from \$401 million for the first six months of 2017 to \$337 million for the first six months of 2018 .
- *Higher discounts on crude oils*. The market prices for refined petroleum products generally track the price of Brent crude oil, which is a benchmark crude oil, and we benefit when we process crude oils that are priced at a discount to Brent crude oil. We benefitted from processing these types of crude oils during the first six months of 2018 and that benefit improved compared to the first six months of 2017 . For example, WTI crude oil, a light sweet crude oil processed in our U.S. Mid-Continent region, sold at a discount to Brent crude oil of \$5.61 per barrel for the first six months of 2018 compared to a discount of \$2.74 per barrel for the first six months of 2017, representing a favorable increase of \$2.87 per barrel. Another example is Maya crude oil, a sour crude oil processed in our U.S. Gulf Coast region, which sold at a discount of \$11.18 per barrel for the first six months of 2018 compared to a discount of \$8.48 per barrel for the first six months of 2017, representing a favorable increase of \$2.70 per barrel. We estimate that the increase in the discounts for crude oils

that we processed during the first six months of 2018 compared to the first six months of 2017 had a favorable impact to our refining segment margin of approximately \$59 million.

- *Decrease in other products margins.* We experienced a decrease in the margins of other products (such as petroleum coke and sulfur) relative to Brent crude oil during the first six months of 2018 compared to the first six months of 2017 due to an increase in the cost of crude oils between the periods. Because the market prices for our other products remain relatively stable, our margins decline when the cost of crude oils that we process increases. For example, the benchmark price of Brent crude oil was \$71.05 per barrel for the first six months of 2018 compared to \$52.78 per barrel for the first six months of 2017, representing an unfavorable increase of \$18.27 per barrel. We estimate that the decrease in other products margins for the first six months of 2018 compared to the first six months of 2017 had an unfavorable impact to our refining segment margin of approximately \$384 million.
- *Decrease in gasoline margins.* We experienced a decrease in gasoline margins during the first six months of 2018 compared to the first six months of 2017. For example, the Brent-based benchmark reference margin for U.S. Gulf Coast CBOB gasoline was \$7.38 per barrel for the first six months of 2018 compared to \$9.58 per barrel for the first six months of 2017, representing an unfavorable decrease of \$2.20 per barrel. Another example is the ANS-based benchmark reference margin for U.S. West Coast CARBOB 87 gasoline, which was \$15.82 per barrel for the first six months of 2018 compared to \$19.89 per barrel for the first six months of 2017, representing an unfavorable decrease of \$4.07 per barrel. We estimate that the decrease in gasoline margins per barrel in the first six months of 2018 compared to the first six months of 2017 had an unfavorable impact to our refining segment margin of approximately \$145 million.
- *Increase in charges from VLP.* Charges from the VLP segment for transportation and terminaling services increased \$51 million in the first six months of 2018 compared to the first six months of 2017 primarily due to additional services provided by a terminal and a product pipeline system acquired by VLP in November 2017 that were formerly a part of the refining segment. Details regarding the increase in charges from VLP are discussed in the VLP segment analysis below.

Refining segment depreciation and amortization expense associated with our cost of sales increased \$16 million primarily due to an increase in refinery turnaround and catalyst amortization expense in the first six months of 2018 compared to the first six months of 2017.

Ethanol Segment Results

Ethanol segment revenues increased \$37 million in the first six months of 2018 compared to the first six months of 2017 primarily due to increases in corn related co-product prices. This improvement in ethanol segment revenues was offset by slightly higher cost of sales between the periods, resulting in an increase in ethanol segment operating income of \$35 million in the first six months of 2018 compared to the first six months of 2017. This increase is primarily due to higher ethanol segment margins, as outlined below.

Ethanol segment margin, as defined in note (g) to the accompanying tables (see page 54), increased \$31 million in the first six months of 2018 compared to the first six months of 2017, primarily due to the following:

- *Higher co-product prices.* An increase in export demand for corn related co-products, primarily distillers grains, had a favorable effect on the prices received. We estimate that the increase in corn

related co-product prices had a favorable impact to our ethanol segment margin of approximately \$75 million.

- *Higher production volumes.* Ethanol segment margin was favorably impacted by increased production volumes of 149,000 gallons per day in the first six months of 2018 compared to the first six months of 2017 primarily due to reliability improvements. We estimate that the increase in production volumes had a favorable impact to our ethanol segment margin of \$14 million.
- *Lower ethanol prices.* Ethanol prices were lower in the first six months of 2018 compared to the first six months of 2017 primarily due to a decrease in both export and domestic demand. For example, the New York Harbor ethanol price was \$1.54 per gallon for the first six months of 2018 compared to \$1.59 per gallon for the first six months of 2017, representing an unfavorable decrease of \$0.05 per gallon. We estimate that the decrease in the price of ethanol had an unfavorable impact to our ethanol segment margin of \$45 million.
- *Higher corn prices.* Corn prices were higher in the first six months of 2018 compared to the first six months of 2017. For example, the CBOT corn price was \$3.75 per bushel for the first six months of 2018 compared to \$3.66 per bushel for the first six months of 2017, representing an unfavorable increase of \$0.09 per bushel. We estimate that the increase in the price of corn had an unfavorable impact to our ethanol segment margin of \$13 million.

VLP Segment Results

VLP segment revenues increased \$51 million in the first six months of 2018 compared to the first six months of 2017 primarily due to incremental revenues generated from transportation and terminaling services associated with assets acquired by VLP in November 2017 that were formerly a part of the refining segment. This increase in VLP segment revenues was partially offset by increases in other components of cost of sales, resulting in an increase in VLP segment operating income of \$26 million in the first six months of 2018 compared to the first six months of 2017. The components of this increase, along with the reasons for the changes in these components, are discussed below.

VLP segment revenues increased \$51 million in the first six months of 2018, as previously noted, primarily due to incremental transportation and terminaling revenues from the Port Arthur terminal and Parkway pipeline, which VLP acquired from Valero in November 2017. The incremental revenues generated by these assets had a favorable impact to VLP segment revenues of \$44 million.

VLP segment cost of sales increased \$25 million primarily due to the costs to operate the Port Arthur terminal and the Parkway pipeline and depreciation expense associated with these assets. VLP acquired these assets in November 2017.

Corporate and Eliminations

Corporate and eliminations, which consists primarily of general and administrative expenses and related depreciation and amortization expense, increased by \$119 million in the first six months of 2018 compared to the first six months of 2017. Excluding the environmental reserve adjustment of \$108 million for the first six months of 2018 reflected in the table on page 50, adjusted corporate and eliminations increased by \$11 million primarily due an increase in employee-related expenses.

LIQUIDITY AND CAPITAL RESOURCES

Liquidity

We believe that we have sufficient funds from operations and, to the extent necessary, from borrowings under our credit facilities, to fund our ongoing operating requirements. We expect that, to the extent necessary, we can raise additional funds from time to time 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.

Our liquidity consisted of the following as of June 30, 2018 (in millions):

Available borrowing capacity from committed facilities:		
Valero Revolver	\$	2,881
Canadian Revolver		53
Accounts receivable sales facility		1,200
Letter of credit facility		100
Total available borrowing capacity		4,234
Cash and cash equivalents ^(a)		4,168
Total liquidity	\$	8,402

(a) Excludes \$283 million of cash and cash equivalents related to our VIEs that is available for use only by our VIEs.

Cash Flows Summary

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

	Six Months Ended June 30,	
	2018	2017
Cash flows provided by (used in):		
Operating activities	\$ 2,197	\$ 2,785
Investing activities	(2,132)	(1,174)
Financing activities	(1,402)	(1,328)
Effect of foreign exchange rate changes on cash	(62)	108
Net increase (decrease) in cash and cash equivalents	\$ (1,399)	\$ 391

Cash Flows for the Six Months Ended June 30, 2018

Our operations generated \$2.2 billion of cash in the first six months of 2018, driven primarily by net income of \$1.5 billion and noncash charges to income for depreciation and amortization expense of \$1.0 billion, partially offset by a negative change in working capital of \$445 million. See "RESULTS OF OPERATIONS" for further discussion of our operations. The change in our working capital is further detailed in Note 12 of Condensed Notes to Consolidated Financial Statements. The use of cash resulting from the \$445 million change in working capital was mainly due to a decrease in income taxes payable resulting from the \$400 million payment of our fourth quarter 2017 estimated taxes in January 2018.

The \$2.2 billion of cash generated by our operations, along with (i) \$1.3 billion in proceeds from debt issuances and borrowings (as further discussed in Note 4 of Condensed Notes to Consolidated Financial Statements) and (ii) \$1.4 billion from available cash on hand, were used mainly to:

- fund \$1.3 billion in capital investments, which include capital expenditures, deferred turnaround and catalyst costs, and investments in joint ventures;
- fund \$562 million for the Peru Acquisition and other minor acquisitions;
- acquire undivided interests in pipeline and terminal assets for \$145 million ;
- redeem our 9.375 percent Senior Notes for \$787 million (or 104.9 percent of stated value);
- make payments on debt and capital lease obligations of \$421 million, of which \$410 million related to the repayment of all outstanding borrowings under the VLP Revolver;
- retire \$137 million of debt assumed in connection with the Peru Acquisition;
- purchase common stock for treasury of \$647 million ; and
- pay common stock dividends of \$690 million .

Cash Flows for the Six Months Ended June 30, 2017

Our operations generated \$2.8 billion of cash in the first six months of 2017 , driven primarily by net income of \$893 million , noncash charges to income of \$999 million related to depreciation and amortization expense, and a positive change in working capital of \$859 million . See “RESULTS OF OPERATIONS” for further discussion of our operations. The change in our working capital is further detailed in Note 12 of Condensed Notes to Consolidated Financial Statements. The source of cash resulting from the \$859 million change in working capital was mainly due to:

- a decrease in receivables, partially offset by a decrease in accounts payable, primarily as a result of the timing of collections of receivables and payments of invoices, respectively, combined with a decrease in commodity prices;
- an increase in accrued expenses mainly due to the timing of payments on our environmental compliance program obligations; and
- a decrease in inventory volumes held.

The \$2.8 billion of cash generated by our operations, along with (i) net proceeds of \$36 million from VLP’s sale of common units representing limited partner interests to the public and (ii) \$108 million from the effects of a favorable change in foreign exchange rates, were used mainly to:

- fund \$1.1 billion in capital investments, which include capital expenditures, deferred turnaround and catalyst costs, and investments in joint ventures;
- acquire an undivided interest in crude system assets for \$72 million ;
- purchase common stock for treasury of \$660 million ;
- pay common stock dividends of \$627 million ;
- pay distributions to noncontrolling interests of \$45 million ; and
- increase available cash on hand by \$391 million .

Summary of Credit Facilities

Information about our outstanding borrowings, letters of credit issued, and availability under our credit facilities is reflected in Note 4 of Condensed Notes to Consolidated Financial Statements.

Capital Resources

Capital Investments

Our anticipated capital investments for 2018 have not changed from the amounts previously disclosed in our Form 10-K for the year ended December 31, 2017 as we expect to incur approximately \$2.7 billion for

capital investments, which includes capital expenditures, turnaround and catalyst costs, and investments in joint ventures. Capital expenditures include the capital expenditures of our consolidated subsidiaries and consolidated VIEs in which we hold an ownership interest. This consists of approximately \$1.7 billion for stay-in-business capital and \$1.0 billion for growth strategies. This capital investment estimate excludes potential strategic acquisitions, including acquisitions of undivided interests. We continuously evaluate our capital budget and make changes as conditions warrant.

In addition to our capital investments noted above, we separately reflect in our statements of cash flows the capital expenditures of certain VIEs that we consolidate even though we do not hold an ownership interest in them. These expenditures are not included in our \$2.7 billion estimate of capital investments for 2018. See Note 7 of Condensed Notes to Consolidated Financial Statements for a description of our VIEs.

Other Matters Impacting Liquidity and Capital Resources

Stock Purchase Program

On January 23, 2018, our board of directors authorized our purchase of up to an additional \$2.5 billion of our outstanding common stock (the 2018 program) with no expiration date. This authorization was in addition to the remaining amount available under a \$2.5 billion program authorized on September 21, 2016 (the 2016 program). As of June 30, 2018, we had approximately \$3.2 billion of authorization remaining available under our programs. We have no obligation to make purchases under these programs.

Pension Plan Funding

Management has elected to increase the discretionary contributions to our pension plans by \$10 million during the second half of 2018, resulting in expected contributions to our pension plans of approximately \$141 million for 2018, which now includes discretionary contributions of \$110 million. Our plan to also contribute approximately \$19 million to our other postretirement benefit plans during 2018 remains unchanged.

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. See Note 5 of Condensed Notes to Consolidated Financial Statements for a further discussion of our environmental matters.

Tax Matters

The IRS has ongoing audits related to our U.S. federal income tax returns from 2010 through 2015. We have received Revenue Agent Reports in connection with the 2010 and 2011 combined audit. We have made significant progress in resolving this audit, which we believe will be settled within the next 12 months. Upon settlement, we anticipate receiving a refund; therefore, we have a receivable associated with this audit as of June 30, 2018. We do not expect to have a significant change to our uncertain tax positions upon the settlement of our ongoing audits, and we believe that the ultimate settlement of our audits will not be material to our financial position, results of operations, or liquidity.

We continue to evaluate both provisional and incomplete estimates due to Tax Reform related to our 2017 tax provision. As discussed in Note 9 of Condensed Notes to Consolidated Financial Statements, there have been no updates to these amounts as of June 30, 2018.

Cash Held by Our International Subsidiaries

In conjunction with our implementation of the provisions under Tax Reform, which was enacted on December 22, 2017 and described in Note 9 of Condensed Notes to Consolidated Financial Statements, we recorded a liability in 2017 for the estimated U.S. federal tax due on the deemed repatriation of the accumulated earnings and profits of our international subsidiaries not previously distributed to us, and we will pay this liability over the eight-year period permitted by the provisions under Tax Reform. Because of the deemed repatriation of these accumulated earnings and profits, there are no longer any U.S. federal income tax consequences associated with the repatriation of any of the \$2.4 billion of cash and cash equivalents held by our international subsidiaries as of June 30, 2018. However, certain countries in which our international subsidiaries are organized impose withholding taxes on cash distributed outside of those countries. We have accrued for withholding taxes on the portion of the cash held by one of our international subsidiaries that we have deemed not to be permanently reinvested in our operations in that country.

Cash provided by operating activities in the U.S. continues to be our primary source of funds to finance our U.S. operations and capital expenditures, as well as our dividends and share repurchases.

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. 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 June 30, 2018, our contractual obligations included debt, capital lease obligations, operating lease obligations, purchase obligations, and other long-term liabilities. There were no material changes outside the ordinary course of business with respect to our contractual obligations during the six months ended June 30, 2018. However, in the ordinary course of business, we had various debt-related activities during the six months ended June 30, 2018 as described in Note 4 of Condensed Notes to Consolidated Financial Statements.

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

Rating Agency	Rating	
	Valero	VLP
Moody's Investors Service	Baa2 (stable outlook)	Baa3 (stable outlook)
Standard & Poor's Ratings Services	BBB (stable outlook)	BBB- (stable outlook)
Fitch Ratings	BBB (stable outlook)	BBB- (stable 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. As of June 30, 2018, there were no significant changes to our critical accounting policies since the date our annual report on Form 10-K for the year ended December 31, 2017 was filed.

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), grain (primarily corn), soybean oil, 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 swaps, 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, natural gas purchases, and corn purchases to lock in the price of those forecasted transactions at existing market prices that we deem favorable.

We use the futures markets for the available liquidity, which provides greater flexibility in transacting our price risk activities. We use swaps primarily to manage our price exposure. We also enter into certain commodity derivative instruments for trading purposes to take advantage of existing market conditions related to future results of operations and cash flows.

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 prepared a sensitivity analysis of open positions of our commodity derivative instruments. As of June 30, 2018 and December 31, 2017, the amount of gain or loss in the fair value of commodity 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 14 of Condensed Notes to Consolidated Financial Statements for notional volumes associated with these derivative contracts as of June 30, 2018.

COMPLIANCE PROGRAM PRICE RISK

We are exposed to market risk related to the volatility in the price of biofuel credits and GHG emission credits needed to comply with various governmental and regulatory programs. To manage these risks, 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 June 30, 2018 and December 31, 2017, 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 14 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.

June 30, 2018								
Expected Maturity Dates							Total (a)	Fair Value
	2018	2019	2020	2021	2022	There-after		
Fixed rate	\$ —	\$ —	\$ 850	\$ 10	\$ —	\$ 7,474	\$ 8,334	\$ 9,110
Average interest rate	—%	—%	6.1%	5.0%	—%	5.4%	5.5%	
Floating rate (b)	\$ 159	\$ 5	\$ 6	\$ 5	\$ 6	\$ 19	\$ 200	\$ 200
Average interest rate	3.9%	4.2%	4.2%	4.2%	4.2%	4.2%	3.9%	

December 31, 2017								
Expected Maturity Dates							Total (a)	Fair Value
	2018	2019	2020	2021	2022	There-after		
Fixed rate	\$ —	\$ 750	\$ 850	\$ —	\$ —	\$ 6,224	\$ 7,824	\$ 9,236
Average interest rate	—%	9.4%	6.1%	—%	—%	5.6%	6.0%	
Floating rate (b)	\$ 106	\$ 6	\$ 416	\$ 6	\$ 6	\$ 19	\$ 559	\$ 559
Average interest rate	2.1%	3.8%	2.9%	3.8%	3.8%	3.8%	2.8%	

(a) Excludes unamortized discounts and debt issuance costs.

(b) As of June 30, 2018 and December 31, 2017, we had an interest rate swap associated with \$44 million and \$49 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

As of June 30, 2018, we had commitments to purchase \$487 million of U.S. dollars. Our market risk was minimal on these contracts, as all of them matured on or before July 31, 2018.

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 June 30, 2018 .

(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.

We continue the implementation process to prepare for the adoption of Topic 842, which we discuss in Note 1 of Condensed Notes to Consolidated Financial Statements. We expect that there will be changes affecting our internal control over financial reporting in conjunction with adopting this standard. The most significant changes we expect relate to the implementation of a lease evaluation system and a lease accounting system, including the integration of our lease accounting system with our general ledger and modifications to the related procurement and payment processes.

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, 2017 .

Litigation

We incorporate by reference into this Item our disclosures made in Part I, Item 1 of this report included in Note 5 of Condensed Notes to Consolidated Financial Statements under the caption “*Environmental Matters*” and “*Litigation Matters.*”

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.

People of the State of Illinois, ex rel. v. The Premcor Refining Group Inc., et al. , Third Judicial Circuit Court, Madison County (Case No. 03-CH-00459, filed May 29, 2003) (Hartford Refinery and terminal). In our quarterly report on Form 10-Q for the quarter ended March 31, 2018, we reported that the Illinois EPA had filed suit against The Premcor Refining Group Inc. alleging violations of air and waste regulations at Premcor’s Hartford, Illinois terminal and closed refinery. During the second quarter of 2018, we entered into a consent order with the Illinois EPA resolving all outstanding issues pending with the state. This consent order has been lodged with the court and is pending the court’s confirmation. Our litigation with other potentially responsible parties (PRPs) remains ongoing and we are continuing to assert our various defenses, limitations and potential rights for contribution from the other PRPs.

Texas Commission on Environmental Quality (TCEQ) (Port Arthur). During the second quarter of 2018, we received a Notice of Enforcement from the TCEQ alleging unauthorized emissions associated with the November 18, 2017 release of crude oil from the 24-inch fill pipe of Tank T-285. 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 ended December 31, 2017 .

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 second quarter of 2018 .

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)
April 2018	46,946	\$ 108.23	46,946	—	\$3.5 billion
May 2018	779,733	\$ 116.23	601,552	178,181	\$3.4 billion
June 2018	1,969,635	\$ 117.34	1,176	1,968,459	\$3.2 billion
Total	2,796,314	\$ 116.88	649,674	2,146,640	\$3.2 billion

(a) The shares reported in this column represent purchases settled in the second quarter of 2018 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, with no expiration date, which was in addition to the remaining amount available under a \$2.5 billion program authorized on September 21, 2016 . As of June 30, 2018 , the approximate dollar value of shares that may yet be purchased under the 2016 program is \$712 million and no purchases have been made under the 2018 program.

ITEM 6. EXHIBITS

Exhibit

<u>No.</u>	<u>Description</u>
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<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>
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<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>
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<u>**32.01</u>	<u>Section 1350 Certifications (under Section 906 of the Sarbanes-Oxley Act of 2002).</u>
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<u>***101</u>	<u>Interactive Data Files</u>
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* 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/ Donna M. Titzman
Donna M. Titzman
Executive Vice President and
Chief Financial Officer
(Duly Authorized Officer and Principal
Financial and Accounting Officer)

Date: August 6, 2018

**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: August 6, 2018

/s/ Joseph W. Gorder

Joseph W. Gorder

Chief Executive Officer and President

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

I, Donna M. Titzman, 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: August 6, 2018

/s/ Donna M. Titzman

Donna M. Titzman

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 June 30, 2018 , 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 and President

August 6, 2018

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 June 30, 2018 , 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/ Donna M. Titzman

Donna M. Titzman

Executive Vice President and Chief Financial Officer

August 6, 2018

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.