VALERO ENERGY CORP/TX
Form 11-K
June 24, 2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

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

For the fiscal year ended December 31, 2015

Commission File Number 1-13175

VALERO ENERGY CORPORATION THRIFT PLAN

VALERO ENERGY CORPORATION
One Valero Way
San Antonio, Texas 78249

VALERO ENERGY CORPORATION THRIFT PLAN

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All other supplemental schedules required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 are omitted because they are not applicable or not required.

Report of Independent Registered Public Accounting Firm

Valero Energy Corporation Benefit Plans Administrative Committee
Valero Energy Corporation Thrift Plan:

We have audited the accompanying statements of net assets available for benefits of the Valero Energy Corporation Thrift Plan (the Thrift Plan) as of December 31, 2015 and 2014, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Thrift Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Thrift Plan as of December 31, 2015 and 2014, and the changes in net assets available for benefits for the years then ended in conformity with U.S. generally accepted accounting principles.

The supplemental information in the accompanying Schedule H, Line 4i–Schedule of Assets (Held at End of Year) as of December 31, 2015, has been subjected to audit procedures performed in conjunction with the audit of the Thrift Plan's 2015 financial statements. The supplemental information is presented for the purpose of additional analysis and is not a required part of the financial statements but includes supplemental information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental information is the responsibility of the Thrift Plan's management. Our audit procedures included determining whether the supplemental information reconciles to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In forming our opinion on the supplemental information, we evaluated whether the supplemental information, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information in the accompanying Schedule H, Line 4i–Schedule of Assets (Held at End of Year) as of December 31, 2015 is fairly stated in all material respects in relation to the 2015 financial statements as a whole.

/s/ KPMG LLP

San Antonio, Texas
June 24, 2016

VALERO ENERGY CORPORATION THRIFT PLAN
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

	December 31, 2015	2014
Assets		
Investments at fair value:		
Valero Energy Corporation common stock	$423,600,805	$354,058,132
Common/collective trusts	484,306,512	463,835,323
Mutual funds	620,694,833	614,854,821
Money market security	44,300,509	26,495,395
Self-directed investments	300,172,149	299,689,147
Total investments at fair value	1,873,074,808	1,758,932,818
Receivables:		
Notes receivable from participants	43,966,589	43,197,894
Employer contributions, net of forfeitures of $296,420 and $1,000,000, respectively	1,151,435	639,655
Due from brokers for securities sold	416,751	97,703
Total receivables	45,534,775	43,935,252
Cash	1,281,362	619,570
Total assets	1,919,890,945	1,803,487,640
Net assets available for benefits	$1,919,890,945	$1,803,487,640

See Notes to Financial Statements.

VALERO ENERGY CORPORATION THRIFT PLAN
STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

	Year Ended December 31,	
	2015	2014
Additions:		
Additions to net assets attributed to:		
Investment income:		
Interest income	$83,817	$90,762
Dividend income	55,618,989	63,378,979
Net appreciation in fair value of investments	89,017,736	18,471,342
Total investment income	144,720,542	81,941,083
Interest income on notes receivable from participants	1,773,952	1,699,418
Contributions:		
Participant	90,216,230	81,005,653
Employer	53,712,184	47,041,383
Total contributions	143,928,414	128,047,036
Total additions	290,422,908	211,687,537
Deductions:		
Deductions from net assets attributed to withdrawals by participants	(174,019,603)	(172,374,080)
Net increase in net assets available for benefits before asset transfers	116,403,305	39,313,457
Asset transfers in from Valero Energy Corporation Savings Plan	—	42,956,032
Net increase in net assets available for benefits	116,403,305	82,269,489
Net assets available for benefits:		
Beginning of year	1,803,487,640	1,721,218,151
End of year	$1,919,890,945	$1,803,487,640

See Notes to Financial Statements.

VALERO ENERGY CORPORATION THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS

1. DESCRIPTION OF THE PLAN

General
The Valero Energy Corporation Thrift Plan (Thrift Plan) is a qualified profit-sharing plan covering certain of Valero Energy Corporation's employees in the United States (U.S.). (See "Eligibility and Participation" below for a description of employees eligible for participation in the Thrift Plan.) The Thrift Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). As used in this report, the term "Valero" may refer, depending upon the context, to Valero Energy Corporation, one or more of its consolidated subsidiaries, or all of them taken as a whole.

A portion of the Thrift Plan is designated as an employee stock ownership plan (ESOP), as defined in Section 4975(e)(7) of the Internal Revenue Code of 1986, as amended (the Code), and Department of Labor Regulation §2550.407d-6. The Thrift Plan is composed of an ESOP portion and a non-ESOP portion. The ESOP portion consists only of investments in Valero common stock. A dividend payout feature allows participants to elect to receive dividends from Valero common stock in cash as taxable distributions or to continue to have such dividends reinvested in the Thrift Plan. The designation as an ESOP has no other effect on benefits under the Thrift Plan.

The description of the Thrift Plan included in these notes to financial statements provides only general information. Participants should refer to the plan document for a complete description of the Thrift Plan's provisions.

Plan Administration
Valero is the plan sponsor. Valero is an international manufacturer and marketer of transportation fuels, other petrochemical products, and power. As of December 31, 2015, Valero employed approximately 10,000 people and its assets included 15 refineries with a combined total throughput capacity of approximately 3.0 million barrels per day, 11 ethanol plants with a combined production capacity of 1.4 billion gallons per year, a 50-megawatt wind farm, and renewable diesel production from a joint venture. Through subsidiaries, Valero owns the general partner of Valero Energy Partners LP, a midstream master limited partnership. Approximately 7,500 outlets carry the Valero, Diamond Shamrock, Shamrock, and Beacon brands in the U.S. and the Caribbean; Ultramar in Canada; and Texaco in the United Kingdom and Ireland. Valero is a Fortune 500 company based in San Antonio, Texas.

Valero's common stock trades on the New York Stock Exchange under the symbol "VLO."

The Valero Energy Corporation Benefit Plans Administrative Committee (Administrative Committee), consisting of persons selected by Valero, administers the Thrift Plan. The members of the Administrative Committee serve without compensation for services in that capacity. Bank of America, N.A. (BANA) is the trustee under the Thrift Plan and has custody of the securities and investments of the Thrift Plan through a trust. Merrill Lynch, Pierce, Fenner & Smith Incorporated, an affiliate of BANA, is the record keeper for the Thrift Plan.

VALERO ENERGY CORPORATION THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS (Continued)

Eligibility and Participation
Valero's U.S. employees are immediately eligible to participate in the Thrift Plan, except for renewables organization employees prior to June 2, 2014. These excluded employees were eligible to participate in the Valero Energy Corporation Savings Plan (the Savings Plan), another plan sponsored by Valero. As further described under "Merger of the Savings Plan into the Thrift Plan," the Savings Plan was merged into the Thrift Plan on June 2, 2014. In addition, employees at the Port Arthur and Memphis Refineries represented by the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union and its Local 13-423 (Plant Group Only), and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union and its Local 9-00631, respectively, are eligible to participate in the Premcor Retirement Savings Plan, another plan sponsored by Valero. Participation in the Thrift Plan is voluntary.

Merger of the Savings Plan into the Thrift Plan
Effective June 2, 2014, the Savings Plan was merged into the Thrift Plan and as a result of this merger, the Savings Plan ceased to exist as a separate plan. All Savings Plan participants (renewables organization employees and employees terminated in connection with the separation of the retail business in May 2013) at the time of the merger became participants in the Thrift Plan. As Thrift Plan participants, renewables organization employees receive the same benefits as other Thrift Plan participants. In addition, renewables organization employees are eligible to receive discretionary profit-sharing contributions based on annual eligible compensation, as further described under "Contributions." Assets transferred from the Savings Plan to the Thrift Plan on June 2, 2014 totaled $42,956,032.

Separation of the Retail Business
On May 1, 2013, Valero completed the separation of its retail business by creating an independent public company named CST Brands, Inc. (CST) and distributing 80 percent of the outstanding shares of CST common stock to Valero's stockholders. Valero disposed of its 20 percent retained interest in CST on November 14, 2013.

The CST common stock held by the Thrift Plan as a result of this distribution was a frozen investment and no additional contributions or earnings could be made or allocated to acquire additional shares of CST common stock. Effective May 1, 2014, if a participant had an established self-directed investment account, then all whole CST shares were transferred in-kind to the participant's self-directed investment account; partial shares were liquidated and the cash proceeds were invested based on the participant's investment elections as of May 1, 2014. If a participant did not have a self-directed investment account, then all CST shares were liquidated and the cash proceeds were invested based on the participant's investment elections as of May 1, 2014.

Contributions
Participants may make contributions of not less than 1 percent or more than 50 percent of their annual total salary immediately upon commencement of participation, subject to certain limitations under the Code. Annual total salary represents a participant's annual base salary together with overtime pay, commissions, and other eligible forms of cash compensation other than annual performance bonus payments, bonus payments to employees represented by a collective bargaining agreement, and unused vacation pay.

VALERO ENERGY CORPORATION THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS (Continued)

Participants elect to make pre-tax, after-tax and/or designated Roth 401(k) contributions to the Thrift Plan. Any employee may make rollover contributions and eligible Roth 401(k) rollover contributions to the Thrift Plan. Former employees who retain an account balance under the Thrift Plan and who have received or who are eligible to receive a distribution from a defined benefit pension plan sponsored by Valero are also eligible to make a rollover contribution to the Thrift Plan. For the years ended December 31, 2015 and 2014, rollover contributions totaled $6,234,814 and $5,378,536, respectively, and are included in participant contributions.

The Code establishes an annual limitation on the amount of individual pre-tax and/or Roth 401(k) salary deferral contributions. For the years ended December 31, 2015 and 2014, this limit was $18,000 and $17,500, respectively. For the years ended December 31, 2015 and 2014, participants who attained age 50 before the end of the year were eligible to make catch-up contributions of up to $6,000 and $5,500, respectively. All or any portion of an eligible participant's catch-up contribution can be designated as a Roth 401(k) catch-up contribution.

Valero makes an employer contribution equal to $1.00 for every $1.00 of a participant's contributions up to 7 percent of annual total salary. All employer contributions are made in cash and are invested according to the investment options elected for the participant contributions.

Effective June 2, 2014, Valero, at the discretion of the Valero Energy Corporation Board of Directors or such other party as designated by such Board, may make profit-sharing contributions to the Thrift Plan to be allocated to the accounts of all eligible renewables organization employees. For the years ended December 31, 2015 and 2014, the Administrative Committee approved profit-sharing contributions totaling $1,447,855 and $1,639,655, respectively, which was offset by available forfeitures. Employer profit-sharing contributions receivable as of December 31, 2015 and 2014 were received by the Thrift Plan in February 2016 and 2015, respectively.

Participant Accounts
Individual accounts are maintained for each participant. Each participant's account is adjusted to reflect participant contributions, employer contributions, withdrawals, income, expenses, gains, and losses attributable to the participant's account.

Vesting
Participants are vested 100 percent in their individual participant contribution accounts at all times. Participants vest in their employer matching contribution accounts at the rate of 20 percent per year and are 100 percent vested after five years of continuous service. Active participants vest 100 percent in any profit-sharing contributions after completion of three years of service.

Continuous service begins the first day for which an employee is paid and terminates on the date of the employee's retirement, death, or other termination from service. If an employee's employment is terminated and the employee is subsequently reemployed within 12 months, the period between the severance from service and the date of reemployment is generally included in continuous service for vesting purposes. If the employee is not reemployed within one year after a severance from service date, the employee is deemed to have incurred a break in service.

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VALERO ENERGY CORPORATION THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS (Continued)

Forfeitures
The Thrift Plan provides that if a participant incurs a break in service prior to becoming vested in any part of his employer account, the participant's prior continuous service will not be disregarded for purposes of the Thrift Plan until the break in service equals or exceeds five successive years. Upon a participant's termination of employment for other than death, total and permanent disability, or retirement on or after age 65, the nonvested portion of the participant's employer account is forfeited upon distribution. In the event the participant is reemployed prior to incurring a break in service of five successive years, any amounts forfeited under this provision may be reinstated.

Valero's employer contributions are reduced by any forfeited nonvested accounts of terminated participants and increased by the value of prior forfeited nonvested accounts for participants who are rehired within five years from date of termination. Employer contributions for the years ended December 31, 2015 and 2014 were reduced by $546,420 and $2,400,000, respectively, from forfeited nonvested accounts. As of December 31, 2015 and 2014, forfeited nonvested accounts available to reduce future employer contributions or plan administrative expenses were $262,142 and $249,199, respectively.

Investment Options
Participants direct the investment of 100 percent of their participant contributions and may transfer existing account balances into any of the investment options offered. These investment options include Valero common stock, common/collective trusts, mutual funds, a money market security, and other self-directed investments.

Participants may not designate more than 20 percent of their contributions to be invested in Valero common stock. Transfers into Valero common stock will not be permitted to the extent a transfer would result in more than 50 percent of the aggregate value of the participant's account being invested in Valero common stock.

If a participant wishes to transfer assets from the Federated Capital Preservation Fund to the money market security or to any self-directed investment options, then the proceeds from the sale of the Federated Capital Preservation Fund will be transferred into another of the Thrift Plan's core investment options for 90 days before purchasing shares of the money market security or directing the proceeds into self-directed investment options.

Withdrawals and Distributions
Participants may make the following types of withdrawals of all or part of their respective accounts:

- one withdrawal during any six-month period from a participant's after-tax account and rollover contribution account with no suspension of future contributions;
- upon completion of five years of participation in the Thrift Plan, one withdrawal from a participant's after-tax account and employer account, with a similar withdrawal allowed 36 months after the date of a previous withdrawal under this provision, with no suspension of future contributions;
- upon reaching age 59½, one withdrawal during any six-month period from a participant's account and employer account; or

VALERO ENERGY CORPORATION THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS (Continued)

- upon furnishing proof of financial necessity, one withdrawal during any six-month period from a participant's account and the vested portion of the employer account, but, for withdrawals of pre-tax amounts, not to exceed the aggregate amount of the participant's pre-tax contributions. Individuals who receive a withdrawal for financial necessity will be suspended from making contributions to the Thrift Plan for a period of at least six months.

Upon a participant's death, total and permanent disability, or retirement on or after age 65, the participant or the beneficiary of a deceased participant is entitled to a distribution of the entire value of the participant's account and employer account regardless of whether or not the accounts are fully vested. Upon a participant's termination for any other reason, the participant is entitled to a distribution of only the value of the participant's account and the vested portion of the participant's employer account. Distributions resulting from any of these occurrences may be received in a single sum in whole shares of Valero common stock and cash, or entirely in cash. Alternatively, a participant or beneficiary may elect to receive this distribution in the form of equal monthly installments over a period not exceeding the lesser of (i) five years or (ii) the participant's life expectancy or the joint life expectancy of the participant and the participant's designated beneficiary. In addition, when the value of a distribution to a participant exceeds $1,000, the distribution may be made prior to the participant attaining age 65 only with the participant's consent.

Terminated participants may elect to have the Thrift Plan trustee hold their accounts for distribution to them at a date not later than April 1 of the calendar year after which they attain age 70½. In this event, terminated participants continue to share in the income, expenses, gains, and losses of the Thrift Plan until their accounts are distributed.

The Thrift Plan allows participants who are called to active duty military service and who are on military leave for a period of 179 days or more to make withdrawals of all or any portion of their account.

Notes Receivable from Participants
Participants may borrow a minimum of $500. The maximum loan amount a participant may have outstanding is restricted to the lesser of:

(a) $50,000, reduced by the excess of (i) the highest outstanding balance of the participant's loans during a one-year period over (ii) the participant's then currently outstanding loan balance of all participant loans on the day any new loan is made, or
(b) one-half of the current value of the participant's vested interest in his Thrift Plan accounts.

The term of any loan may not exceed five years unless the loan is for the purchase of a participant's principal residence, in which case the term of the loan shall not exceed 15 years. The balance of the participant's account and vested portion of his employer account serve as security for the loan. Loans bear interest at a reasonable rate as established by the Administrative Committee, presently at prime plus 1 percent. As of December 31, 2015, interest rates on outstanding loans ranged from 4.25 percent to 10.5 percent and maturity dates ranged from January 2016 to January 2031. Loan repayments of principal and interest are made through payroll deductions or as otherwise determined. Participants may have two loans outstanding under the Thrift Plan at any time.

Plan Expenses
Plan administrative expenses can be paid by Valero or through the application of forfeited nonvested accounts. Valero also provides certain other services at no cost to the Thrift Plan. Investment expenses relating to

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VALERO ENERGY CORPORATION THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS (Continued)

individual participant accounts, such as investment management expenses, have been deducted from interest income or dividend income. Individual participant transaction fees, such as overnight delivery fees and redemption fees, are deducted from the respective participant's account and are included in withdrawals by participants.

2. BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The financial statements of the Thrift Plan are prepared on the accrual basis of accounting in accordance with U.S. generally accepted accounting principles (GAAP).

Reclassifications

Certain amounts reported as of December 31, 2014 have been reclassified and disclosures have been removed or modified in order to conform to the 2015 presentation related to the retrospective adoption of certain amendments to the Accounting Standards Codification (ASC) effective January 1, 2015 as further described below under "Significant Accounting Policies–Accounting Pronouncements Adopted During the Year."

Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates that affect the amounts of assets and changes therein reported in the financial statements and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Valuation of Investments

The Thrift Plan's investments are stated at fair value as described in Note 3.

Income Recognition

Purchases and sales of investments are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.
Net appreciation (depreciation) in fair value of investments consists of net realized gains and losses on the sale of investments and net unrealized appreciation (depreciation) of investments.

Notes Receivable from Participants

Participant loans are measured at their unpaid principal balance plus any accrued but unpaid interest. Interest income is recorded on the accrual basis. Related fees are expensed when they are incurred and are reflected in withdrawals by participants. No allowance for credit losses has been recorded as of December 31, 2015 or 2014. A loan that has been defaulted upon and not cured within a reasonable period of time may be deemed a distribution from the Thrift Plan. The loan balance is reduced and withdrawals to participants are increased after the participant makes final withdrawal from the Thrift Plan.

Withdrawals by Participants

Withdrawals by participants are recorded when paid.

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VALERO ENERGY CORPORATION THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS (Continued)

Risks and Uncertainties
The Thrift Plan's investments, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility risk. Due to the level of risk associated with certain investments, it is reasonably possible that changes in the values of investments will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statement of net assets available for benefits in the future.

Accounting Pronouncements Adopted During the Year
In May 2015, the Financial Accounting Standards Board (FASB) amended the provisions of ASC Topic 820, "Fair Value Measurements," to remove the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient. The guidance also removes the requirement to make certain disclosures for all investments that are eligible to be measured using the net asset value per share practical expedient and limits those disclosures to investments for which the entity has elected to measure the fair value using that practical expedient. These provisions are to be applied retrospectively and are effective for annual reporting periods beginning after December 15, 2015, and interim reporting periods within those annual periods, with early adoption permitted. Effective January 1, 2015, the Thrift Plan adopted this guidance on a retrospective basis. Such adoption did not affect the Thrift Plan's net assets available for benefits or changes in net assets available for benefits, but resulted in the removal of an investment class from the fair value hierarchy presentation.

In July 2015, the FASB amended the provisions of ASC Topic 960, "Defined Benefit Pension Plans," Topic 962, "Defined Contribution Pension Plans," and Topic 965, "Health and Welfare Benefit Plans" to simplify financial reporting by employee benefit plans. In general, the amendments eliminate the requirements for employee benefit plans to (i) measure the fair value of fully benefit-responsive investment contracts and provide the related fair value disclosures; (ii) disaggregate investments by nature, characteristics, and risks either on the face of the financial statements or in the notes to the financial statements; (iii) disclose the net appreciation or depreciation in fair value of investments by general type; and (iv) disclose individual investments that represent five percent or more of the net assets available for benefits. These provisions are to be applied retrospectively and are effective for annual reporting periods beginning after December 15, 2015, with early adoption permitted. Effective January 1, 2015, the Thrift Plan adopted this guidance on a retrospective basis. Such adoption did not affect the Thrift Plan's net assets available for benefits or changes in net assets available for benefits, but resulted in the revised presentation of the Thrift Plan's investments and eliminated disclosures as described in (ii), (iii), and (iv) above.

VALERO ENERGY CORPORATION THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS (Continued)

3. FAIR VALUE MEASUREMENTS

A fair value hierarchy (Level 1, Level 2, or Level 3) is used to categorize fair value amounts based on the quality of inputs used to measure fair value. Accordingly, fair values determined by Level 1 inputs utilize unadjusted quoted prices in active markets for identical assets or liabilities. Fair values determined by Level 2 inputs are based on quoted prices for similar assets or liabilities in active markets, and inputs other than quoted prices that are observable for the asset or liability. Level 3 inputs are unobservable inputs for the asset or liability for which there is little, if any, market activity at the measurement date. The Thrift Plan uses appropriate valuation techniques based on the available inputs to measure the fair values of its applicable assets and liabilities. When available, the Thrift Plan measures fair value using Level 1 inputs because they generally provide the most reliable evidence of fair value.

The valuation methods used to measure the Thrift Plan's financial instruments at fair value are as follows:

- Common stock, mutual funds, and self-directed investments are measured at fair value using a market approach based on quotations from national securities exchanges and are categorized in Level 1 of the fair value hierarchy.
- The money market security represents interest-bearing cash and is therefore categorized in Level 1 of the fair value hierarchy.
- All common/collective trusts, including the Federated Capital Preservation Fund, which primarily holds investments in fully benefit-responsive contracts, are valued at the net asset value of units of the common/collective trusts. The net asset value is used as a practical expedient to estimate fair value. This practical expedient would not be used if it is determined to be probable that the fund will sell the investment for an amount different from the reported net asset value. There are no imposed restrictions as to the redemption of these investments.

The tables below present information about the Thrift Plan's assets measured at fair value on a recurring basis and indicate the fair value hierarchy of the inputs utilized to determine the fair values as of December 31, 2015 and 2014.

	Fair Value Measurements Using			Total as of December 31, 2015
	Level 1	Level 2	Level 3	
Valero common stock	$423,600,805	$ —	$ —	$423,600,805
Mutual funds	620,694,833	—	—	620,694,833
Money market security	44,300,509	—	—	44,300,509
Self-directed investments	300,172,149	—	—	300,172,149
Total assets in the fair value hierarchy	$1,388,768,296	$ —	$ —	1,388,768,296
Common/collective trusts measured at net asset value (a)				484,306,512
Investments at fair value				$1,873,074,808

VALERO ENERGY CORPORATION THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS (Continued)

	Fair Value Measurements Using			Total as of December 31, 2014
	Level 1	Level 2	Level 3	
Valero common stock	$354,058,132	$ —	$ —	$354,058,132
Mutual funds	614,854,821	—	—	614,854,821
Money market security	26,495,395	—	—	26,495,395
Self-directed investments	299,689,147	—	—	299,689,147
Total assets in the fair value hierarchy	$1,295,097,495	$ —	$ —	1,295,097,495
Common/collective trusts measured at net asset value (a)				463,835,323
Investments at fair value				$1,758,932,818

(a) In accordance with ASC Topic 820 and as described in Note 2, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy. The fair value amounts presented in these tables are intended to permit reconciliation of the fair value hierarchy to the line items presented in the statements of net assets available for benefits.

There were no transfers between levels for assets held as of December 31, 2015 and 2014.

The Thrift Plan's investment in shares of Valero common stock represents 22.6 percent and 20.1 percent of total investments at fair value as of December 31, 2015 and 2014, respectively. For the years ended December 31, 2015 and 2014, dividend income included $11,067,809 and $7,723,846, respectively, of dividends paid on Valero common stock. The closing price for Valero common stock was $70.71 and $49.50 on December 31, 2015 and 2014, respectively. As of June 17, 2016, the closing price for Valero common stock was $51.71.

4. PARTY-IN-INTEREST TRANSACTIONS

Certain Thrift Plan investments are shares of common/collective trusts managed by an affiliate of BANA, the trustee of the Thrift Plan and a party-in-interest with respect to the Thrift Plan. In addition, the Thrift Plan allows for loans to participants and investment in Valero's common stock. Valero, the sponsor of the Thrift Plan and a party-in-interest with respect to the Thrift Plan, provides accounting and administrative services at no cost to the Thrift Plan. These transactions are covered by an exemption from the "prohibited transactions" provisions of ERISA and the Code.

5. PLAN TERMINATION

Although it has not expressed any intent to do so, Valero has the right under the Thrift Plan to terminate the Thrift Plan at any time subject to the provisions of ERISA. In the event of any termination of the Thrift Plan or complete discontinuance of employer contributions, participants would become 100 percent vested in their employer accounts. If the Thrift Plan were terminated, the Administrative Committee would direct the trustee to distribute the remaining assets, after payment of all Thrift Plan expenses, to participants and beneficiaries in proportion to their respective balances.

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VALERO ENERGY CORPORATION THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS (Continued)

6. TAX STATUS

The Internal Revenue Service has determined and informed the plan sponsor by a letter dated April 29, 2014, that the Thrift Plan is designed in accordance with applicable sections of the Code. Although the Thrift Plan has been amended since receiving the determination letter, the plan sponsor believes that the Thrift Plan is designed and is currently being operated in compliance with the applicable requirements of the Code, and therefore believes that the Thrift Plan is qualified and the related trust is tax-exempt. The plan sponsor believes the Thrift Plan is not subject to tax examinations for plan years prior to 2012.

7. RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500 Annual Return/Report of Employee Benefit Plan:

	December 31,	
	2015	2014
Net assets available for benefits per the financial statements	$1,919,890,945	$1,803,487,640
Adjustment from contract value to fair value	—	443,153
Amounts allocated to withdrawing participants	(1,281,264)	(619,337)
Deemed distributions of participant loans	(1,369,219)	(1,415,240)
Net assets available for benefits per the Form 5500	$1,917,240,462	$1,801,896,216

The following is a reconciliation of investment income per the financial statements to the Form 5500 Annual Return/Report of Employee Benefit Plan:

	Year Ended December 31,	
	2015	2014
Investment income per the financial statements	$144,720,542	$81,941,083
Interest income on notes receivable from participants per the financial statements	1,773,952	1,699,418
Adjustment from contract value to fair value:		
End of year	—	443,153
Beginning of year	(443,153)	(417,216)
Investment income per the Form 5500	$146,051,341	$83,666,438

VALERO ENERGY CORPORATION THRIFT PLAN
NOTES TO FINANCIAL STATEMENTS (Continued)

The following is a reconciliation of withdrawals by participants per the financial statements to the Form 5500 Annual Return/Report of Employee Benefit Plan:

	Year Ended December 31,	
	2015	2014
Withdrawals by participants per the financial statements	$174,019,603	$172,374,080
Amounts allocated to withdrawing participants:		
End of year	1,281,264	619,337
Beginning of year	(619,337)	(849,917)
Benefits paid to participants per the Form 5500	$174,681,530	$172,143,500

The following is a reconciliation of deemed distributions of participant loans per the financial statements to the Form 5500 Annual Return/Report of Employee Benefit Plan:

	Year Ended December 31,	
	2015	2014
Deemed distributions of participant loans per the financial statements	$—	$—
Deemed distributions of participant loans:		
End of year	1,369,219	1,415,240
Beginning of year	(1,415,240)	(1,274,265)
Deemed distributions of participant loans per the Form 5500	$(46,021)	$140,975

VALERO ENERGY CORPORATION THRIFT PLAN
EIN: 74-1828067
Plan No. 002

Schedule H, Line 4i–Schedule of Assets (Held at End of Year)
As of December 31, 2015

	Identity of Issue/Description of Investment	Current Value
	Common stock:	
*	Valero Energy Corporation	$423,600,805
	Common/collective trusts:	
	Federated Capital Preservation Fund	150,837,924
	LifePath Index 2020 Fund	28,177,305
	LifePath Index 2025 Fund	42,952,011
	LifePath Index 2030 Fund	40,862,529
	LifePath Index 2035 Fund	32,139,175
	LifePath Index 2040 Fund	26,716,913
	LifePath Index 2045 Fund	20,178,003
	LifePath Index 2050 Fund	13,007,515
	LifePath Index 2055 Fund	7,797,265
	LifePath Index 2060 Fund	769,048
	LifePath Index Retirement Fund	15,227,526
	SSgA S&P 500 Index Fund	86,457,903
	Victory Small Cap Value Collective Fund	19,183,395
	Total common/collective trusts	484,306,512
	Mutual funds:	
	American Funds EuroPacific Growth Fund	111,227,728
	American Funds Growth Fund of America	128,548,218
	BlackRock Basic Value Fund, Inc.	72,353,501
	BlackRock Small Cap Growth Equity Fund	28,158,071
	Pioneer Bond Fund	91,325,836
	Vanguard Mid-Cap Index Fund Institutional Shares	71,331,435
	Vanguard PRIMECAP Fund Admiral Shares	117,750,044
	Total mutual funds	620,694,833
	Money market security:	
*	Retirement Bank Account	44,300,509
	Self-directed investments	300,172,149
*	Notes receivable from participants (interest rates range from 4.25% to 10.5%; maturity dates range from January 2016 to January 2031)	43,966,589
		$1,917,041,397

* Party-in-interest to the Thrift Plan.

See accompanying report of independent registered public accounting firm.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Valero Energy Corporation Benefit Plans Administrative Committee has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

VALERO ENERGY CORPORATION
THRIFT PLAN

By /s/ Donna M. Titzman
Donna M. Titzman
Chairman of the Valero Energy
Corporation
Benefit Plans Administrative
Committee
Senior Vice President and Treasurer,
Valero Energy Corporation

Date: June 24, 2016