VALERO ENERGY CORP/TX
Form 11-K
June 25, 2018

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, 2017

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

Table of Contents

	Page
Report of Independent Registered Public Accounting Firm	1
Statements of Net Assets Available for Benefits as of December 31, 2017 and 2016	3
Statements of Changes in Net Assets Available for Benefits for the Years Ended December 31, 2017 and 2016	4
Notes to Financial Statements	5
Schedule H, Line 4i–Schedule of Assets (Held at End of Year) as of December 31, 2017	14
Signature	15

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 and the Plan Participants
Valero Energy Corporation Thrift Plan:

Opinion on the Financial Statements

We have audited the accompanying statements of net assets available for benefits of the Valero Energy Corporation Thrift Plan (the Plan) as of December 31, 2017 and 2016, the related statements of changes in net assets available for benefits for the years then ended, and the related notes (collectively, the financial statements). In our opinion, the financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2017 and 2016, and the changes in net assets available for benefits for the years then ended, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Accompanying Supplemental Information

The Schedule H, Line 4i–Schedule of Assets (Held at End of Year) as of December 31, 2017 has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental information is the responsibility of the 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

1

the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information is fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ KPMG LLP

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

San Antonio, Texas
June 25, 2018

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

	December 31, 2017	2016
Assets		
Investments at fair value:		
Valero Energy Corporation common stock	$474,397,365	$400,463,676
Common/collective trusts	608,015,033	535,517,715
Mutual funds	840,788,082	677,358,682
Interest-bearing cash	46,415,470	46,645,445
Self-directed investments	376,684,135	322,552,446
Total investments at fair value	2,346,300,085	1,982,537,964
Receivables:		
Notes receivable from participants	47,580,383	45,686,770
Employer contributions, net of forfeitures of $200,000 and $250,000, respectively	1,303,534	1,221,360
Due from brokers for securities sold	497,023	331,522
Total receivables	49,380,940	47,239,652
Cash	1,324,351	922,005
Total assets	2,397,005,376	2,030,699,621
Net assets available for benefits	$2,397,005,376	$2,030,699,621

See Notes to Financial Statements.

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

	Year Ended December 31,	
	2017	2016
Additions:		
Investment income:		
Interest income	$156,039	$71,141
Dividend income	65,780,013	46,184,153
Net appreciation in fair value of investments	335,035,349	64,768,377
Total investment income	400,971,401	111,023,671
Interest income on notes receivable from participants	1,985,248	1,823,578
Contributions:		
Participant	99,432,383	92,455,850
Employer	57,534,358	54,909,963
Total contributions	156,966,741	147,365,813
Total additions	559,923,390	260,213,062
Deductions:		
Benefit payments	(193,617,635)	(149,404,386)
Net increase in net assets available for benefits	366,305,755	110,808,676
Net assets available for benefits:		
Beginning of year	2,030,699,621	1,919,890,945
End of year	$2,397,005,376	$2,030,699,621

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 (the 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 Plan.) The 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 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 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 Plan. The designation as an ESOP has no other effect on benefits under the Plan.

The description of the 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 Plan's provisions.

Plan Administration

Valero is the plan sponsor. Valero is an international manufacturer and marketer of transportation fuels and other petrochemical products. As of December 31, 2017, Valero employed approximately 10,000 people and its assets included 15 petroleum refineries with a combined throughput capacity of approximately 3.1 million barrels per day and 11 ethanol plants with a combined production capacity of 1.45 billion gallons per year. The petroleum refineries are located in the U.S., Canada, and the United Kingdom, and the ethanol plants are located in the Mid-Continent region of the U.S.

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 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 Plan and has custody of the securities and investments of the Plan through a trust. Merrill Lynch, Pierce, Fenner & Smith Incorporated, an affiliate of BANA, is the record keeper for the Plan.

Eligibility and Participation

Valero's U.S. employees are immediately eligible to participate in the Plan. Participation in the Plan is voluntary. However, certain employees at Valero's Port Arthur and Memphis Refineries are only eligible to participate in the Premcor Retirement Savings Plan, another plan sponsored by Valero. Effective January 1, 2017, eligible employees are automatically enrolled in the Plan as further described under "Contributions."

5

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

Contributions

Participants may make contributions of not less than one 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, unused vacation pay, and payments for unused elective holidays.

Participants elect to make pre-tax, after-tax and/or designated Roth 401(k) contributions to the Plan. Any employee may make eligible rollover contributions and eligible Roth 401(k) rollover contributions to the Plan. Former employees who retain an account balance under the 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 Plan. For the years ended December 31, 2017 and 2016, rollover contributions totaled $8,456,789 and $6,180,020, 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. This limit was $18,000 for each of the years ended December 31, 2017 and 2016. Participants who attained age 50 before the end of the year were eligible to make catch-up contributions of up to $6,000 for each of the years ended December 31, 2017 and 2016. 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 seven 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.

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 Plan to the accounts of all eligible ethanol plant employees (renewables organization employees). Such contributions are allocated based on annual eligible compensation. For the years ended December 31, 2017 and 2016, the Administrative Committee approved profit-sharing contributions totaling $1,503,534 and $1,471,360, respectively, which was offset by available forfeitures. Employer profit-sharing contributions receivable as of December 31, 2017 and 2016 were received by the Plan in February 2018 and 2017, respectively.

Effective January 1, 2017, each eligible employee hired or rehired on or after January 1, 2017 is automatically enrolled in the Plan at a pre-tax contribution rate of three percent of their annual total salary, unless the eligible employee elects not to participate in the Plan. The automatically enrolled participant's contribution rate will increase by one percent per year until a maximum contribution rate of seven percent is reached, unless the participant elects to opt out of the automatic increases or voluntarily changes his contribution rate.

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.

6

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

Vesting
Participants are vested 100 percent in their individual participant contribution accounts at all times. Eligible renewables organization employees vest 100 percent in any profit-sharing contributions after completion of three years of service. Prior to January 1, 2017, all participants vested in their employer matching contribution accounts at the rate of 20 percent per year and were 100 percent vested after five years of continuous service. Effective January 1, 2017, participants who are active employees and are not renewables organization employees are 100 percent vested in their employer matching contribution accounts at all times. Renewables organization employees continue to 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.

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.

Forfeitures
The 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 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, 2017 and 2016 were reduced by $350,000 and $250,000, respectively, from forfeited nonvested accounts. As of December 31, 2017 and 2016, forfeited nonvested accounts available to reduce future employer contributions or plan administrative expenses were $151,644 and $289,854, 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, an interest-bearing cash account (Retirement Bank Account), 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 Retirement Bank Account or to any self-directed investment options, then the proceeds from the sale of the Federated

7

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

Capital Preservation Fund will be transferred into another of the Plan's core investment options for 90 days before purchasing shares of the Retirement Bank Account or directing the proceeds into self-directed investment options.

Withdrawals and Distributions

Only a participant who is also an employee may make the following types of withdrawals of all or part of the participant's 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 becoming fully vested, one withdrawal from a participant's employer or profit-sharing 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
- 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 Plan for a period of at least six months. A participant whose principal residence or place of employment was in a covered disaster area due to (i) the Louisiana storms in August 2016, (ii) Hurricane Harvey in August 2017, or (iii) the California wildfires in October 2017 was permitted to take a financial necessity withdrawal without furnishing proof of financial necessity and was not subject to the six-month suspension from making future contributions to the Plan.

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 the above occurrences may be made in a single sum distribution in (i) whole shares of Valero common stock, cash for fractional shares, and the participant's interest in all other investments, or (ii) entirely in cash. In lieu of the single sum distribution, a participant or beneficiary may elect to receive the value of the participant's account 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 beneficiary. If the value of a vested account balance is equal to or less than $1,000, the account balance may be distributed to the participant in a cash lump sum distribution without the participant's consent.

Effective January 1, 2018, the alternative to the single sum distribution option described in the preceding paragraph was revised to allow a participant or beneficiary whose account balance exceeds $5,000 to elect to receive the value of the account in the form of (i) installments over a period not to exceed the life expectancy of the participant or the beneficiary, (ii) partial distributions as designated by the participant or the beneficiary, or (iii) any combination of these forms. Also, effective January 1, 2018, the value of a vested account balance that is equal to or less than $5,000 but greater than $1,000 may be distributed to the participant in a cash

8

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

lump sum without the participant's consent. If the participant does not elect to either (i) have such distribution transferred directly to an eligible retirement plan in a direct rollover or (ii) receive such distribution directly, the Administrative Committee will make a cash direct rollover of the lump sum distribution to an individual retirement account in the terminated participant's name. The distribution of a vested account balance greater than $5,000 shall not be made without the participant's consent.

Terminated participants may elect to have the 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 Plan until their accounts are distributed.

The 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. Effective January 1, 2017, the participant must be an employee to obtain a loan. 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 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. Loan repayments of principal and interest are made through payroll deductions or as otherwise determined. Participants may have two loans outstanding under the Plan at any time.

Plan Expenses
Plan administrative expenses, including trustee fees and administrative fees, may be paid by the Plan unless paid by Valero. Valero also provides certain other services at no cost to the Plan. Investment expenses relating to 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 benefit payments.

2. BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

9

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

Management has evaluated events that occurred after December 31, 2017 through the date these financial statements were available to be issued on June 25, 2018. Any material subsequent events that occurred during this time have been properly recognized or disclosed in these financial statements.

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

Valuation of Investments
The 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
Notes receivable from participants 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 benefit payments. No allowance for credit losses has been recorded as of December 31, 2017 or 2016. A loan that has been defaulted upon and not cured within a reasonable period of time may be deemed a distribution from the Plan. The loan balance is reduced and benefit payments are increased after the participant makes final withdrawal from the Plan.

Payment of Benefits
Benefits are recorded when paid.

Risks and Uncertainties
The Plan’s investments, in general, are exposed to various risks, such as interest rate, credit, and market 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.

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, quoted prices for identical or similar assets or liabilities in markets that are not active, 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 Plan uses appropriate valuation techniques

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

based on the available inputs to measure the fair values of its applicable assets and liabilities. When available, the 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 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 quoted prices from national securities exchanges and are categorized in Level 1 of the fair value hierarchy.
- The cost of interest-bearing cash approximates its fair value 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 as determined by the issuer of the trust based on the fair values of the underlying net assets divided by the number of units outstanding. The net asset value per unit is a quoted price in a market that is not active; therefore, these investments are classified within Level 2 of the fair value hierarchy. There are no imposed restrictions as to the redemption of these investments.

The tables below present information about the 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, 2017 and 2016.

	Fair Value Measurements Using			Total as of
	Level 1	Level 2	Level 3	December 31, 2017
Valero common stock	$474,397,365	$—	$ —	$474,397,365
Common/collective trusts	—	608,015,033	—	608,015,033
Mutual funds	840,788,082	—	—	840,788,082
Interest-bearing cash	46,415,470	—	—	46,415,470
Self-directed investments	376,684,135	—	—	376,684,135
Investments at fair value	$1,738,285,052	$608,015,033	$ —	$2,346,300,085

	Fair Value Measurements Using			Total as of
	Level 1	Level 2	Level 3	December 31, 2016
Valero common stock	$400,463,676	$—	$ —	$400,463,676
Common/collective trusts	—	535,517,715	—	535,517,715
Mutual funds	677,358,682	—	—	677,358,682
Interest-bearing cash	46,645,445	—	—	46,645,445
Self-directed investments	322,552,446	—	—	322,552,446
Investments at fair value	$1,447,020,249	$535,517,715	$ —	$1,982,537,964

There were no transfers between levels for assets held as of December 31, 2017 and 2016.

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

As of December 31, 2017 and 2016, the Plan's investment in shares of Valero common stock represents 20.2 percent of total investments at fair value for both periods. For the years ended December 31, 2017 and 2016, dividend income included $15,737,156 and $14,512,540, respectively, of dividends paid on Valero common stock. The closing price for Valero common stock was $91.91 and $68.32 on December 31, 2017 and 2016, respectively. As of June 15, 2018, the closing price for Valero common stock was $115.18.

4. RELATED-PARTY AND PARTY-IN-INTEREST TRANSACTIONS

Certain Plan investments are shares of common/collective trusts managed by an affiliate of BANA, the Plan's trustee. Administrative expenses incurred with the Plan's trustee were immaterial for the years ended December 31, 2017 and 2016. Fees paid by the Plan for investment management services were included as a reduction of the return earned on each fund. In addition, the Plan allows for loans to participants and investment in Valero's common stock. Valero, the sponsor of the Plan, provides accounting and administrative services at no cost to the Plan. These transactions are party-in-interest transactions under ERISA and 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 Plan to terminate the Plan at any time subject to the provisions of ERISA. In the event of any termination of the Plan or complete discontinuance of employer contributions, participants would become 100 percent vested in their employer accounts. If the Plan were terminated, the Administrative Committee would direct the trustee to distribute the remaining assets, after payment of all Plan expenses, to participants and beneficiaries in proportion to their respective balances.

6. TAX STATUS

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

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, 2017	2016
Net assets available for benefits per the financial statements	$2,397,005,376	$2,030,699,621
Amounts allocated to withdrawing participants	(1,530,931)	(923,773)
Deemed distributions of participant loans	(1,392,661)	(1,393,575)
Net assets available for benefits per the Form 5500	$2,394,081,784	$2,028,382,273

12

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

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,	
	2017	2016
Investment income per the financial statements	$400,971,401	$111,023,671
Interest income on notes receivable from participants per the financial statements	1,985,248	1,823,578
Investment income per the Form 5500	$402,956,649	$112,847,249

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

	Year Ended December 31,	
	2017	2016
Benefit payments per the financial statements	$193,617,635	$149,404,386
Amounts allocated to withdrawing participants:		
End of year	1,530,931	923,773
Beginning of year	(923,773)	(1,281,264)
Benefit payments per the Form 5500	$194,224,793	$149,046,895

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,	
	2017	2016
Deemed distributions of participant loans per the financial statements	$—	$—
Deemed distributions of participant loans:		
End of year	1,392,661	1,393,575
Beginning of year	(1,393,575)	(1,369,219)
Deemed distributions of participant loans per the Form 5500	$(914)	$24,356

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, 2017

	Identity of Issue/Description of Investment	Current Value
	Common stock:	
*	Valero Energy Corporation	$474,397,365
	Common/collective trusts:	
	Federated Capital Preservation Fund	140,099,373
	LifePath Index 2020 Fund	24,902,250
	LifePath Index 2025 Fund	49,197,554
	LifePath Index 2030 Fund	49,578,884
	LifePath Index 2035 Fund	47,054,615
	LifePath Index 2040 Fund	37,772,791
	LifePath Index 2045 Fund	31,500,048
	LifePath Index 2050 Fund	23,189,387
	LifePath Index 2055 Fund	14,325,300
	LifePath Index 2060 Fund	4,393,375
	LifePath Index Retirement Fund	15,941,835
	SSgA S&P 500 Index Fund	134,928,694
	Victory Small Cap Value Collective Fund	35,130,927
	Total common/collective trusts	608,015,033
	Mutual funds:	
	American Funds EuroPacific Growth Fund	162,854,335
	American Funds Growth Fund of America	166,166,932
	BlackRock Advantage Small Cap Growth Fund	38,610,769
	BlackRock Basic Value Fund	80,071,484
	BlackRock BIF Money Fund	213,234
	Pioneer Bond Fund	113,980,309
	Vanguard Mid-Cap Index Fund Institutional Shares	111,707,703
	Vanguard PRIMECAP Fund Admiral Shares	167,183,316
	Total mutual funds	840,788,082
	Interest-bearing cash:	
*	Retirement Bank Account	46,415,470
	Self-directed investments	376,684,135
*	Notes receivable from participants (interest rates range from 4.25% to 9.25%; maturity dates range from January 2018 to January 2033)	47,580,383
		$2,393,880,468

* Party-in-interest to the 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/ Joseph M. Van Horn
Joseph M. Van Horn
Chairman of the Valero Energy Corporation
Benefit Plans Administrative Committee
Vice President Risk Management and Trading Support,
Valero Energy Corporation

Date: June 25, 2018