

GREEN PLAINS INC.

FORM 10-Q (Quarterly Report)

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

FORM 10-Q

Quarterly Report Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

For the Quarterly Period Ended June 30 , 2017

Commission File Number 001-32924

GREEN PLAINS INC.

(Exact name of registrant as specified in its charter)

Iowa (State or other jurisdiction of incorporation or organization) **84-1652107** (I.R.S. Employer Identification No.)
1811 Aksarben Drive , Omaha, NE 681 06 (Address of principal executive offices, including zip code) **(402) 884-8700** (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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company)
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 common stock, par value \$0.001 per share, outstanding as of August 1, 2017, was 41,484,094 shares.

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Commonly Used Defined Terms

The abbreviations, acronyms and industry terminology used in this quarterly report are defined as follows:

Green Plains Inc. and Subsidiaries:

Green Plains; the company	Green Plains Inc. and its subsidiaries
BioProcess Algae	BioProcess Algae LLC
Fleischmann's Vinegar	Fleischmann's Vinegar Company, Inc.
Green Plains Cattle	Green Plains Cattle Company LLC
Green Plains Grain	Green Plains Grain Company LLC
Green Plains Partners; the partnership	Green Plains Partners LP
Green Plains Processing	Green Plains Processing LLC and its subsidiaries
Green Plains Trade	Green Plains Trade Group LLC

Accounting Defined Terms:

ASC	Accounting Standards Codification
EBITDA	Earnings before interest, income taxes, depreciation and amortization
EPS	Earnings per share
Exchange Act	Securities Exchange Act of 1934, as amended
GAAP	U.S. Generally Accepted Accounting Principles
LIBOR	London Interbank Offered Rate
LTIP	Green Plains Partners LP 2015 Long-Term Incentive Plan
SEC	Securities and Exchange Commission

Industry Defined Terms:

CAFE	Corporate Average Fuel Economy
E15	Gasoline blended with up to 15% ethanol by volume
E85	Gasoline blended with up to 85% ethanol by volume
EIA	U.S. Energy Information Administration
EISA	Energy Independence and Security Act of 2007, as amended
EPA	U.S. Environmental Protection Agency
MmB TU	Million British Thermal Units
Mmg	Million gallons
Mmgy	Million gallons per year
RFS II	Renewable Fuels Standard II
RVO	Renewable volume obligations
RVP	Reid Vapor Pressure
U.S.	United States

PART I – FINANCIAL INFORMATION

Item 1 . Financial Statements

GREEN PLAINS INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(in thousands, except share amounts)

	June 30, 2017	December 31, 2016
	(unaudited)	
ASSETS		
Current assets		
Cash and cash equivalents	\$ 195,442	\$ 304,211
Restricted cash	29,592	51,979
Accounts receivable, net of allowances of \$285 and \$266, respectively	134,885	147,495
Income taxes receivable	11,641	10,379
Inventories	444,738	422,181
Prepaid expenses and other	17,144	17,095
Derivative financial instruments	32,784	47,236
Total current assets	866,226	1,000,576
Property and equipment, net of accumulated depreciation of \$466,548 and \$417,993, respectively	1,199,080	1,178,706
Goodwill	183,696	183,696
Other assets	147,621	143,514
Total assets	\$ 2,396,623	\$ 2,506,492
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	\$ 139,732	\$ 192,275
Accrued and other liabilities	44,933	67,473
Derivative financial instruments	8,165	8,916
Short-term notes payable and other borrowings	341,463	291,223
Current maturities of long-term debt	6,178	35,059
Total current liabilities	540,471	594,946
Long-term debt	733,780	782,610
Deferred income taxes	122,810	140,262
Other liabilities	8,595	9,483
Total liabilities	1,405,656	1,527,301
Commitments and contingencies (Note 13)		
Stockholders' equity		
Common stock, \$0.001 par value; 75,000,000 shares authorized; 46,415,977 and 46,079,108 shares issued, and 41,484,712 and 38,364,118 shares outstanding, respectively	46	46
Additional paid-in capital	679,153	659,200
Retained earnings	254,030	283,214
Accumulated other comprehensive loss	(10,400)	(4,137)
Treasury stock, 4,931,265 and 7,714,990 shares, respectively	(48,460)	(75,816)
Total Green Plains stockholders' equity	874,369	862,507
Noncontrolling interests	116,598	116,684
Total stockholders' equity	990,967	979,191
Total liabilities and stockholders' equity	\$ 2,396,623	\$ 2,506,492

See accompanying notes to the consolidated financial statements.

GREEN PLAINS INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited and in thousands, except per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenues				
Product revenues	\$ 884,712	\$ 885,772	\$ 1,770,924	\$ 1,632,956
Service revenues	1,551	1,955	3,023	3,975
Total revenues	<u>886,263</u>	<u>887,727</u>	<u>1,773,947</u>	<u>1,636,931</u>
Costs and expenses				
Cost of goods sold	830,019	809,524	1,641,915	1,534,211
Operations and maintenance expenses	8,267	8,504	16,798	17,149
Selling, general and administrative expenses	25,575	23,589	49,357	43,962
Depreciation and amortization expenses	26,188	18,701	52,271	36,846
Total costs and expenses	<u>890,049</u>	<u>860,318</u>	<u>1,760,341</u>	<u>1,632,168</u>
Operating income (loss)	<u>(3,786)</u>	<u>27,409</u>	<u>13,606</u>	<u>4,763</u>
Other income (expense)				
Interest income	314	368	678	778
Interest expense	(19,430)	(10,499)	(37,926)	(21,297)
Other, net	1,357	1,178	1,367	(497)
Total other expense	<u>(17,759)</u>	<u>(8,953)</u>	<u>(35,881)</u>	<u>(21,016)</u>
Income (loss) before income taxes	<u>(21,545)</u>	<u>18,456</u>	<u>(22,275)</u>	<u>(16,253)</u>
Income tax expense (benefit)	<u>(9,749)</u>	<u>5,471</u>	<u>(12,130)</u>	<u>(9,422)</u>
Net income (loss)	<u>(11,796)</u>	<u>12,985</u>	<u>(10,145)</u>	<u>(6,831)</u>
Net income attributable to noncontrolling interests	4,570	4,794	9,818	9,116
Net income (loss) attributable to Green Plains	<u>\$ (16,366)</u>	<u>\$ 8,191</u>	<u>\$ (19,963)</u>	<u>\$ (15,947)</u>
Earnings per share:				
Net income (loss) attributable to Green Plains - basic	<u>\$ (0.41)</u>	<u>\$ 0.21</u>	<u>\$ (0.51)</u>	<u>\$ (0.42)</u>
Net income (loss) attributable to Green Plains - diluted	<u>\$ (0.41)</u>	<u>\$ 0.21</u>	<u>\$ (0.51)</u>	<u>\$ (0.42)</u>
Weighted average shares outstanding:				
Basic	<u>40,220</u>	<u>38,425</u>	<u>39,326</u>	<u>38,311</u>
Diluted	<u>40,220</u>	<u>38,536</u>	<u>39,326</u>	<u>38,311</u>
Cash dividend declared per share	<u>\$ 0.12</u>	<u>\$ 0.12</u>	<u>\$ 0.24</u>	<u>\$ 0.24</u>

See accompanying notes to the consolidated financial statements.

GREEN PLAINS INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(unaudited and in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Net income (loss)	\$ (11,796)	\$ 12,985	\$ (10,145)	\$ (6,831)
Other comprehensive income (loss), net of tax:				
Unrealized gains (losses) on derivatives arising during period, net of tax (expense) benefit of \$2,026, \$2,849, \$1,058 and \$2,093, respectively	(3,418)	(4,840)	(1,776)	(3,314)
Reclassification of realized (gains) losses on derivatives, net of tax expense (benefit) of \$824, \$(932), \$2,672 and \$(225), respectively	(1,353)	1,783	(4,487)	356
Total other comprehensive loss, net of tax	(4,771)	(3,057)	(6,263)	(2,958)
Comprehensive income (loss)	(16,567)	9,928	(16,408)	(9,789)
Comprehensive income attributable to noncontrolling interests	4,570	4,794	9,818	9,116
Comprehensive (income) loss attributable to Green Plains	\$ (21,137)	\$ 5,134	\$ (26,226)	\$ (18,905)

See accompanying notes to the consolidated financial statements.

GREEN PLAINS INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited and in thousands)

	Six Months Ended	
	June 30,	
	2017	2016
Cash flows from operating activities:		
Net loss	\$ (10,145)	\$ (6,831)
Adjustments to reconcile net loss to net cash provided (used) by operating activities:		
Depreciation and amortization	60,196	41,433
Loss on exchange of 3.25% convertible notes due 2018	1,291	-
Gain on disposal of assets	(1,422)	-
Deferred income taxes	(12,896)	(17,936)
Stock-based compensation	5,497	4,648
Undistributed equity in loss of affiliates	75	508
Other	19	58
Changes in operating assets and liabilities before effects of business combinations:		
Accounts receivable	12,341	(45,364)
Inventories	(1,079)	73,257
Derivative financial instruments	3,622	(160)
Prepaid expenses and other assets	(9)	668
Accounts payable and accrued liabilities	(74,435)	(50,981)
Current income taxes	(1,262)	5,067
Change in restricted cash	4,299	-
Other	1,322	567
Net cash provided (used) by operating activities	<u>(12,586)</u>	<u>4,934</u>
Cash flows from investing activities:		
Purchases of property and equipment	(27,985)	(29,084)
Acquisition of a business, net of cash acquired	(61,727)	(19,935)
Distributions from (investments in) unconsolidated subsidiaries	(8,849)	994
Net cash used by investing activities	<u>(98,561)</u>	<u>(48,025)</u>
Cash flows from financing activities:		
Proceeds from the issuance of long-term debt	33,800	66,000
Payments of principal on long-term debt	(66,339)	(21,223)
Proceeds from short-term borrowings	2,149,950	1,970,026
Payments on short-term borrowings	(2,099,929)	(1,951,610)
Cash payment for exchange of 3.25% convertible notes due 2018	(8,523)	-
Payments for repurchase of common stock	-	(6,005)
Payments of cash dividends and distributions	(19,244)	(18,520)
Change in restricted cash	18,089	8,234
Payments of loan fees	(1,675)	-
Payments related to tax withholdings for stock-based compensation	(3,801)	(2,168)
Proceeds from exercise of stock options	50	410
Net cash provided by financing activities	<u>2,378</u>	<u>45,144</u>
Net change in cash and cash equivalents	(108,769)	2,053
Cash and cash equivalents, beginning of period	304,211	384,867
Cash and cash equivalents, end of period	<u>\$ 195,442</u>	<u>\$ 386,920</u>

Continued on the following page

GREEN PLAINS INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited and in thousands)

Continued from the previous page

	Six Months Ended	
	June 30,	
	2017	2016
Non-cash financing activity:		
Exchange of 3.25% convertible notes due 2018 for shares of common stock	\$ 47,743	\$ -
Exchange of common stock held in treasury stock for 3.25% convertible notes due 2018	\$ 27,356	\$ -
Supplemental disclosures of cash flow:		
Cash paid for income taxes	\$ 1,976	\$ 3,304
Cash paid for interest	\$ 30,134	\$ 20,564
Supplemental investing and financing activities:		
Assets acquired in acquisitions and mergers, net of cash	\$ 62,209	\$ 23,986
Less: liabilities assumed	(482)	(1,244)
Less: allocation of noncontrolling interest in consolidation of BioProcess Algae	-	(2,807)
Net assets acquired	\$ 61,727	\$ 19,935

See accompanying notes to the consolidated financial statements.

GREEN PLAINS INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

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

References to the Company

References to “Green Plains” or the “company” in the consolidated financial statements and in these notes to the consolidated financial statements refer to Green Plains Inc., an Iowa corporation, and its subsidiaries.

Consolidated Financial Statements

The consolidated financial statements include the company’s accounts and all significant intercompany balances and transactions are eliminated. Unconsolidated entities are included in the financial statements on an equity basis. The company owns a 62.5% limited partner interest and a 2.0% general partner interest in Green Plains Partners LP. Public investors own the remaining 35.5% limited partner interest in the partnership. The partnership is consolidated in the company’s financial statements. Effective April 1, 2016, the company increased its ownership of BioProcess Algae, a joint venture formed in 2008, to 82.8% and consolidated BioProcess Algae in its consolidated financial statements beginning on that date.

The accompanying unaudited consolidated financial statements are prepared in accordance with GAAP for interim financial information and the instructions to Form 10-Q and Article 10 of Regulation S-X. Because they do not include all of the information and footnotes required by GAAP, the consolidated financial statements should be read in conjunction with the company’s annual report on Form 10-K for the year ended December 31, 2016.

The unaudited financial information reflects adjustments which are, in the opinion of management, necessary for a fair presentation of results of operations, financial position and cash flows for the periods presented. The adjustments are normal and recurring in nature, unless otherwise noted. Interim period results are not necessarily indicative of the results to be expected for the entire year.

Reclassifications

Certain prior year amounts were reclassified to conform to the current year presentation. These reclassifications did not affect total revenues, costs and expenses, net income or stockholders’ equity.

Use of Estimates in the Preparation of Consolidated Financial Statements

The preparation of the consolidated financial statements in conformity with GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. The company bases its estimates on historical experience and assumptions it believes are proper and reasonable under the circumstances and regularly evaluates the appropriateness of its estimates and assumptions. Actual results could differ from those estimates. Key accounting policies, including but not limited to those relating to revenue recognition, depreciation of property and equipment, impairment of long-lived assets and goodwill, derivative financial instruments, and accounting for income taxes, are impacted significantly by judgments, assumptions and estimates used in the preparation of the consolidated financial statements.

Description of Business

Green Plains is North America’s second largest consolidated owner of ethanol plants. The company operates within four business segments: (1) ethanol production, which includes the production of ethanol, distillers grains and corn oil, (2) agribusiness and energy services, which includes grain handling and storage and marketing and merchant trading for company-produced and third-party ethanol, distillers grains, corn oil, natural gas and other commodities, (3) food and ingredients, which includes cattle feedlots, vinegar production and food-grade corn oil operations, and (4) partnership, which includes fuel storage and transportation services.

Revenue Recognition

The company recognizes revenue when the following criteria are satisfied: persuasive evidence that an arrangement exists, title of product and risk of loss are transferred to the customer, price is fixed and determinable and collectability is reasonably assured.

Sales of ethanol, distillers grains, corn oil, natural gas and other commodities by the company's marketing business are recognized when title of product and risk of loss are transferred to an external customer. Revenues related to marketing for third parties are presented on a gross basis when the company takes title of the product and assumes risk of loss. Unearned revenue is recorded for goods in transit when the company has received payment but the title has not yet been transferred to the customer. Revenues for receiving, storing, transferring and transporting ethanol and other fuels are recognized when the product is delivered to the customer.

The company routinely enters into fixed-price, physical-delivery energy commodity purchase and sale agreements. At times, the company settles these transactions by transferring its obligations to other counterparties rather than delivering the physical commodity. These transactions are reported net as a component of revenues. Revenues also include realized gains and losses on related derivative financial instruments, ineffectiveness on cash flow hedges and reclassifications of realized gains and losses on effective cash flow hedges from accumulated other comprehensive income or loss.

Sales of products, including agricultural commodities, cattle and vinegar, are recognized when title of product and risk of loss are transferred to the customer, which depends on the agreed upon terms. The sales terms provide passage of title when shipment is made or the commodity is delivered. Revenues related to grain merchandising are presented gross and include shipping and handling, which is also a component of cost of goods sold. Revenues from grain storage are recognized when services are rendered.

A substantial portion of the partnership revenues are derived from fixed-fee commercial agreements for storage, terminal or transportation services. The partnership recognizes revenue when there is evidence an arrangement exists; risk of loss and title transfer to the customer; the price is fixed or determinable; and collectability is reasonably ensured. Revenues from base storage, terminal or transportation services are recognized once these services are performed, which occurs when the product is delivered to the customer.

Cost of Goods Sold

Cost of goods sold includes direct labor, materials and plant overhead costs. Direct labor includes all compensation and related benefits of non-management personnel involved in ethanol plant, vinegar and cattle feedlot operations. Grain purchasing and receiving costs, excluding labor costs for grain buyers and scale operators, are also included in cost of goods sold. Materials include the cost of corn feedstock, denaturant, process chemicals, cattle and veterinary supplies. Corn feedstock costs include unrealized gains and losses on related derivative financial instruments not designated as cash flow hedges, inbound freight charges, inspection costs and transfer costs as well as realized gains and losses on related derivative financial instruments, ineffectiveness on cash flow hedges and reclassifications of realized gains and losses on effective cash flow hedges from accumulated other comprehensive income or loss. Plant overhead consists primarily of plant and feedlot utilities, repairs and maintenance, yard expenses and outbound freight charges. Shipping costs incurred by the company, including railcar costs, are also reflected in cost of goods sold.

The company uses exchange-traded futures and options contracts to minimize the effect of price changes on grain and cattle inventories and forward purchase and sales contracts. Exchange-traded futures and options contracts are valued at quoted market prices and settled predominantly in cash. The company is exposed to loss when counterparties default on forward purchase and sale contracts. Grain inventories held for sale and forward purchase and sale contracts are valued at market prices when available or other market quotes adjusted for differences, primarily in transportation, between the exchange-traded market and local market where the terms of the contract is based. Changes in the fair value of grain inventories held for sale, forward purchase and sale contracts and exchange-traded futures and options contracts are recognized as a component of cost of goods sold.

Operations and Maintenance Expenses

In the partnership segment, transportation expenses represent the primary component of operations and maintenance expenses. Transportation expenses includes railcar leases, freight and shipping of the company's ethanol and co-products, as well as costs incurred storing ethanol at destination terminals.

Derivative Financial Instruments

The company uses various derivative financial instruments, including exchange-traded futures and exchange-traded and over-the-counter options contracts, to minimize risk and the effect of price changes related to corn, ethanol, cattle, natural gas and crude oil. The company monitors and manages this exposure as part of its overall risk management policy to reduce the adverse effect market volatility may have on its operating results. The company may hedge these commodities as one way to mitigate risk, however, there may be situations when these hedging activities themselves result in losses.

By using derivatives to hedge exposures to changes in commodity prices, the company is exposed to credit and market risk. The company's exposure to credit risk includes the counterparty's failure to fulfill its performance obligations under the terms of the derivative contract. The company minimizes its credit risk by entering into transactions with high quality counterparties, limiting the amount of financial exposure it has with each counterparty and monitoring their financial condition. Market risk is the risk that the value of the financial instrument might be adversely affected by a change in commodity prices or interest rates. The company manages market risk by incorporating parameters to monitor exposure within its risk management strategy, which limits the types of derivative instruments and strategies the company can use and the degree of market risk it can take using derivative instruments.

The company evaluates its physical delivery contracts to determine if they qualify for normal purchase or sale exemptions which are expected to be used or sold over a reasonable period in the normal course of business. Contracts that do not meet the normal purchase or sale criteria are recorded at fair value. Changes in fair value are recorded in operating income unless the contracts qualify for, and the company elects, hedge accounting treatment.

Certain qualifying derivatives related to the ethanol production, agribusiness and energy services and food and ingredients segments are designated as cash flow hedges. The company evaluates the derivative instrument to ascertain its effectiveness prior to entering into cash flow hedges. Ineffectiveness is recognized in current period results, while other unrealized gains and losses are reflected in accumulated other comprehensive income until the gain or loss from the underlying hedged transaction is realized. When it becomes probable a forecasted transaction will not occur, the cash flow hedge treatment is discontinued, which affects earnings. These derivative financial instruments are recognized in current assets or other current liabilities at fair value.

At times, the company hedges its exposure to changes in the value of inventories and designates qualifying derivatives as fair value hedges. The carrying amount of the hedged inventory is adjusted in current period results for changes in fair value. Ineffectiveness of the hedges is recognized in current period results to the extent the change in fair value of the inventory is not offset by the change in fair value of the derivative.

Recent Accounting Pronouncements

Effective January 1, 2017, the company adopted the amended guidance in ASC Topic 330, *Inventory: Simplifying the Measurement of Inventory*, which requires inventory to be measured at lower of cost or net realizable value. Net realizable value is the estimated selling prices during the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The amended guidance was applied prospectively.

Effective January 1, 2017, the company adopted the amended guidance in ASC Topic 718, *Compensation – Stock Compensation: Improvements to Employee Share-Based Payment Accounting*, which requires all income tax effects of awards to be recognized in the income statement when the awards vest or settle. The amended guidance also allows an employer to repurchase more of an employee's shares than it can currently for tax withholding purposes without triggering liability accounting and make a policy election to account for forfeitures as they occur. The amended guidance requiring recognition of excess tax benefits and tax deficiencies in the income statement was applied prospectively. The amended guidance related to the timing of when excess tax benefits are recognized, did not have an impact on the consolidated financial statements. The amended guidance related to the presentation of employee taxes paid on the statement of cash flows was applied retrospectively. This change resulted in a \$2.2 million increase in cash flows from operating activities and a decrease in cash flows from financing activities for the six months ended June 30, 2016. The company has elected to account for forfeitures as they occur. This change did not have a material impact on the financial statements.

Effective January 1, 2018, the company will adopt the amended guidance in ASC Topic 230, *Statement of Cash Flows: Restricted Cash*, which requires amounts generally described as restricted cash and restricted cash equivalents to be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amended guidance will be applied retrospectively.

Effective January 1, 2018, the company will adopt the amended guidance in ASC Topic 606, *Revenue from Contracts with Customers*. ASC Topic 606 is designed to create improved revenue recognition and disclosure comparability in financial statements. The provisions of ASC Topic 606 include a five-step process by which an entity will determine revenue recognition, depicting the transfer of goods or services to customers in amounts reflecting the payment to which an entity expects to be entitled in exchange for those goods or services. The new guidance requires the company to apply the following steps: (1) identify the contract with the customer; (2) identify the performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to the performance obligations in the contract; and (5) recognize revenue when, or as, the company satisfies the performance obligation. ASC Topic 606 requires certain disclosures about contracts with customers and provides more comprehensive guidance for transactions such as service revenue, contract modifications, and multiple-element arrangements. The new standard is effective for fiscal years and interim periods within those years, beginning after December 15, 2017 and allows for early adoption.

The company is in the process of completing a comparison of the company's current revenue recognition policies to the requirements of ASC Topic 606 for each of the company's major revenue categories. The company has established a cross-functional implementation team, consisting of representatives from various business segments. Initial assessment indicates that the amended guidance will not materially change the amount or timing of revenues recognized by the company and the majority of the company's contracts will continue to be recognized at a point in time and that the number of performance obligations and the accounting for variable consideration are not expected to be significantly different from current practice. In addition, many of the company's sales contracts are considered derivatives under ASC Topic 815, *Derivatives and Hedging*, and are therefore excluded from the scope of Topic 606. ASC Topic 606 will also require disclosure of significant changes in contract asset and contract liability balances period to period and the amount of the transaction price allocated to performance obligations that are unsatisfied (or partially unsatisfied) as of the end of the reporting period, as applicable. ASC Topic 606 provides for adoption either retrospectively to each prior reporting period presented or as a cumulative-effect adjustment as of the date of adoption. The company anticipates finalizing its assessment of the financial impact of the new guidance on its consolidated financial statements during the third quarter of 2017. The company anticipates adopting the amended guidance using the modified retrospective transition method.

Effective January 1, 2018, the company will adopt the amended guidance in ASC Topic 740, *Income Taxes: Intra-Entity Transfers of Assets other than Inventory*, which requires the recognition of current and deferred income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The amended guidance will be applied on a modified retrospective basis, with a cumulative-effect adjustment to retained earnings as of the beginning of the year of adoption.

Effective January 1, 2018, the company will adopt the amended guidance in ASC Topic 805, *Business Combinations: Clarifying the Definition of a Business*, which clarifies the definition of a business with the objective of adding guidance to assist companies and other reporting organizations with evaluating whether transactions should be accounted for as acquisitions or disposals of assets or businesses. The amended guidance will be applied prospectively.

Effective January 1, 2019, the company will adopt the amended guidance in ASC Topic 842, *Leases*, which aims to make leasing activities more transparent and comparable and requires substantially all leases to be recognized by lessees on their balance sheet as a right-of-use asset and corresponding lease liability, including leases currently accounted for as operating leases. Early application is permitted. The company is currently evaluating the impact the adoption of the amended guidance will have on the consolidated financial statements and related disclosures, but expects the adoption will result in a significant increase in total assets and liabilities. The amended guidance will be applied on a modified retrospective basis.

Effective January 1, 2020, the company will adopt the amended guidance in ASC Topic 350, *Intangibles – Goodwill and Other: Simplifying the Test for Goodwill Impairment*, which simplifies the measurement of goodwill by eliminating Step 2 from the goodwill impairment test. The annual goodwill impairment test will be performed by comparing the fair value of a reporting unit with its carrying amount. An impairment charge would be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to that reporting unit. The amended guidance will be applied prospectively.

2. ACQUISITIONS

Acquisition of Cattle Feedlots

On May 16, 2017, the company acquired two cattle-feeding operations from Cargill Cattle Feeders, LLC for \$ 57.7 million, including certain working capital adjustments. The transaction included the feed yards located in Leoti, Kansas and

Yuma, Colorado, which added combined feedlot capacity of 155,000 head of cattle to the company's operations. The transaction was financed using cash on hand. There were no material acquisition costs recorded for the acquisition.

As part of the transaction, the company also entered into a long-term cattle supply agreement with Cargill Meat Solutions Corporation. Under the cattle supply agreement, all cattle placed in the Leoti, Yuma and the company's existing Kismet, Kansas feedlots will be sold exclusively to Cargill Meat Solutions under an agreed upon pricing arrangement.

The purchase price allocation is based on the preliminary results of internal valuations. The purchase price and purchase price allocation are preliminary until contractual post-closing working capital adjustments and valuations are finalized.

The following is a summary of the preliminary purchase price of assets acquired and liabilities assumed (in thousands):

Amounts of Identifiable Assets Acquired and Liabilities Assumed	
Inventory	\$ 20,576
Prepaid expenses and other	52
Property and equipment, net	37,205
Current liabilities	(180)
Total identifiable net assets	<u>\$ 57,653</u>

Acquisition of Fleischmann's Vinegar Company

On October 3, 2016, the company acquired all of the issued and outstanding stock of SCI Ingredients Holdings, Inc., the holding company of Fleischmann's Vinegar Company, Inc., for \$258.3 million in cash. A portion of the purchase price was used to repay existing debt. Fleischmann's Vinegar is one of the world's largest producers of food-grade industrial vinegar.

The purchase price allocation is based on the preliminary results of independent valuations. The purchase price and purchase price allocation are preliminary until the final independent valuation reports are issued.

The following is a summary of the preliminary purchase price of assets acquired and liabilities assumed (in thousands):

Amounts of Identifiable Assets Acquired and Liabilities Assumed	
Cash	\$ 4,148
Inventory	9,308
Accounts receivable, net	13,919
Prepaid expenses and other	1,054
Property and equipment	43,011
Intangible assets	94,500
Current liabilities	(9,689)
Income taxes payable	(330)
Deferred tax liabilities	(40,421)
Total identifiable net assets	<u>115,500</u>
Goodwill	142,819
Purchase price	<u>\$ 258,319</u>

As of June 30, 2017, based on the preliminary valuations, the company's customer relationship intangible asset recognized in connection with the Fleischmann's acquisition is \$79.8 million, net of \$4.2 million of accumulated amortization, and has a 15-year weighted-average amortization period. As of June 30, 2017, the company also has an indefinite-lived trade name intangible asset of \$10.5 million. The company recognized \$1.4 million and \$2.8 million of amortization expense associated with the amortizing customer relationship intangible asset during the three and six months ended June 30, 2017, respectively, and expects estimated amortization expense for the next five years of \$5.6 million per annum. The excess of the purchase price over the intangibles fair values was allocated to goodwill, none of which is expected

to be deductible for tax purposes. The goodwill is primarily attributable to the synergies expected to arise after the acquisition.

Acquisition of Ethanol Plants

On September 23, 2016, the company acquired three ethanol plants located in Madison, Illinois, Mount Vernon, Indiana, and York, Nebraska from subsidiaries of Abengoa S.A. for approximately \$234.9 million for the ethanol plant assets, and \$19.1 million for working capital acquired and liabilities assumed. These ethanol facilities have a combined annual production capacity of approximately 230 mmgy.

The purchase price allocation is based on the preliminary results of an independent valuation. The purchase price and purchase price allocation are preliminary until the final independent valuation report is issued. The following is a summary of the preliminary purchase price of assets acquired and liabilities assumed (in thousands):

Amounts of Identifiable Assets Acquired and Liabilities Assumed	
Inventory	\$ 16,904
Accounts receivable, net	1,826
Prepaid expenses and other	2,224
Property and equipment, net	234,947
Other assets	3,885
Current maturities of long-term debt	(406)
Current liabilities	(2,580)
Long-term debt	(2,763)
Total identifiable net assets	<u>\$ 254,037</u>

Concurrently with the company's acquisition of the Abengoa ethanol plants, on September 23, 2016, the partnership acquired the storage assets of the Abengoa ethanol plants from the company for \$90.0 million in a transfer between entities under common control and entered into amendments to the related commercial agreements with Green Plains Trade.

3. FAIR VALUE DISCLOSURES

The following methods, assumptions and valuation techniques were used to estimate the fair value of the company's financial instruments:

Level 1 – unadjusted quoted prices in active markets for identical assets or liabilities the company can access at the measurement date. Level 1 unrealized gains and losses on commodity derivatives relate to exchange-traded open trade equity and option values in the company's brokerage accounts.

Level 2 – directly or indirectly observable inputs such as quoted prices for similar assets or liabilities in active markets other than quoted prices included within Level 1, quoted prices for identical or similar assets in markets that are not active, and other inputs that are observable or can be substantially corroborated by observable market data through correlation or other means. Grain inventories held for sale in the agribusiness segment are valued at nearby futures values, plus or minus nearby basis.

Level 3 – unobservable inputs that are supported by little or no market activity and comprise a significant component of the fair value of the assets or liabilities. The company currently does not have any recurring Level 3 financial instruments.

There have been no changes in valuation techniques and inputs used in measuring fair value. The company's assets and liabilities by level are as follows (in thousands):

Fair Value Measurements at June 30, 2017

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Reclassification for Balance Sheet Presentation	Total
Assets:				
Cash and cash equivalents	\$ 195,442	\$ -	\$ -	\$ 195,442
Restricted cash	29,592	-	-	29,592
Margin deposits	29,743	-	(29,743)	-
Inventories carried at market	-	86,441	-	86,441
Unrealized gains on derivatives	9,460	5,938	17,386	32,784
Other assets	115	12	-	127
Total assets measured at fair value	<u>\$ 264,352</u>	<u>\$ 92,391</u>	<u>\$ (12,357)</u>	<u>\$ 344,386</u>
Liabilities:				
Accounts payable (1)	\$ -	\$ 15,754	\$ -	\$ 15,754
Unrealized losses on derivatives	12,357	8,165	(12,357)	8,165
Other	-	6	-	6
Total liabilities measured at fair value	<u>\$ 12,357</u>	<u>\$ 23,925</u>	<u>\$ (12,357)</u>	<u>\$ 23,925</u>

Fair Value Measurements at December 31, 2016

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Reclassification for Balance Sheet Presentation	Total
Assets:				
Cash and cash equivalents	\$ 304,211	\$ -	\$ -	\$ 304,211
Restricted cash	51,979	-	-	51,979
Margin deposits	50,601	-	(50,601)	-
Inventories carried at market (2)	-	154,022	-	154,022
Unrealized gains on derivatives	8,272	14,818	24,146	47,236
Other assets	116	-	-	116
Total assets measured at fair value	<u>\$ 415,179</u>	<u>\$ 168,840</u>	<u>\$ (26,455)</u>	<u>\$ 557,564</u>
Liabilities:				
Accounts payable (1)	\$ -	\$ 35,288	\$ -	\$ 35,288
Unrealized losses on derivatives	26,455	8,916	(26,455)	8,916
Other liabilities	-	81	-	81
Total liabilities measured at fair value	<u>\$ 26,455</u>	<u>\$ 44,285</u>	<u>\$ (26,455)</u>	<u>\$ 44,285</u>

(1) Accounts payable is generally stated at historical amounts with the exception of \$15.8 million and \$35.3 million at June 30, 2017 and December 31, 2016, respectively, related to certain delivered inventory subject to changes in commodity prices. These payables are hybrid financial instruments for which the company has elected the fair value option.

(2) Inventories carried at market have been revised from previously reported results to include \$77.0 million of inventories held under a fair value hedging relationship. There was no impact to the financial statements resulting from this revision.

The company believes the fair value of its debt was approximately \$1.1 billion compared with a book value of \$1.1 billion at June 30, 2017, and December 31, 2016, respectively. The company estimated the fair value of its outstanding debt using Level 2 inputs. The company believes the fair values of its accounts receivable approximated book value, which was \$134.9 million and \$147.5 million at June 30, 2017, and December 31, 2016, respectively.

Although the company currently does not have any recurring Level 3 financial measurements, the fair values of tangible

assets and goodwill acquired and the equity component of convertible debt issued represent Level 3 measurements that were derived using a combination of the income approach, market approach and cost approach for the specific assets or liabilities being valued.

4. SEGMENT INFORMATION

As a result of acquisitions during 2016, the company implemented organizational segment changes during the fourth quarter of 2016, whereby the company management now reports the financial and operating performance in the following four operating segments: (1) ethanol production, which includes the production of ethanol, distillers grains and corn oil, (2) agribusiness and energy services, which includes grain handling and storage and marketing and merchant trading for company-produced and third-party ethanol, distillers grains, corn oil, natural gas and other commodities, (3) food and ingredients, which includes cattle feedlots, vinegar production and food-grade corn oil operations and (4) partnership, which includes fuel storage and transportation services. Prior periods have been reclassified to conform to the revised segment presentation.

The company has re-evaluated the profitability measure of its reportable segments' operating performance and has determined that segment EBITDA (earnings before interest, taxes, depreciation and amortization) is primarily used by the company's management to evaluate segment operating activities, and therefore is a more meaningful profitability measure than the previously reported segment operating income. In addition, EBITDA is a financial measure that is widely used by analysts and investors in the company's industries. As a result, the company is now including segment EBITDA as a performance measure.

Corporate activities include selling, general and administrative expenses, consisting primarily of compensation, professional fees and overhead costs not directly related to a specific operating segment.

During the normal course of business, the operating segments conduct business with each other. For example, the agribusiness and energy services segment procures grain and natural gas and sells products, including ethanol, distillers grains and corn oil for the ethanol production segment. The partnership segment provides fuel storage and transportation services for the agribusiness and energy services segment. These intersegment activities are treated like third-party transactions with origination, marketing and storage fees charged at estimated market values. Consequently, these transactions affect segment performance; however, they do not impact the company's consolidated results since the revenues and corresponding costs are eliminated.

The following tables set forth certain financial data for the company's operating segments (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenues:				
Ethanol production:				
Revenues from external customers	\$ 617,297	\$ 595,168	\$ 1,237,176	\$ 1,123,496
Intersegment revenues	1,549	-	3,045	-
Total segment revenues	618,846	595,168	1,240,221	1,123,496
Agribusiness and energy services:				
Revenues from external customers	150,755	203,158	319,066	363,303
Intersegment revenues	9,781	8,589	19,273	15,998
Total segment revenues	160,536	211,747	338,339	379,301
Food and ingredients:				
Revenues from external customers	116,660	87,446	214,682	146,157
Intersegment revenues	37	38	75	75
Total segment revenues	116,697	87,484	214,757	146,232
Partnership:				
Revenues from external customers	1,551	1,955	3,023	3,975
Intersegment revenues	23,514	23,538	49,271	45,306
Total segment revenues	25,065	25,493	52,294	49,281
Revenues including intersegment activity	921,144	919,892	1,845,611	1,698,310
Intersegment eliminations	(34,881)	(32,165)	(71,664)	(61,379)
Revenues as reported	\$ 886,263	\$ 887,727	\$ 1,773,947	\$ 1,636,931

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Cost of goods sold:				
Ethanol production	\$ 612,646	\$ 565,438	\$ 1,211,784	\$ 1,099,936
Agribusiness and energy services	152,110	195,077	318,504	354,492
Food and ingredients	100,009	81,041	183,044	140,295
Partnership	-	-	-	-
Intersegment eliminations	(34,746)	(32,032)	(71,417)	(60,512)
	\$ 830,019	\$ 809,524	\$ 1,641,915	\$ 1,534,211

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
EBITDA:				
Ethanol production	\$ (873)	\$ 22,744	\$ 12,951	\$ 9,008
Agribusiness and energy services	3,747	11,881	10,760	14,936
Food and ingredients	13,955	6,042	26,469	4,965
Partnership	16,066	16,312	33,960	30,621
Intersegment eliminations	(80)	(314)	(155)	(1,135)
Corporate activities	(8,742)	(9,009)	(16,063)	(16,505)
	\$ 24,073	\$ 47,656	\$ 67,922	\$ 41,890

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Depreciation and amortization:				
Ethanol production	\$ 20,142	\$ 15,150	\$ 40,484	\$ 30,930
Agribusiness and energy services	659	947	1,319	1,253
Food and ingredients	3,240	274	6,120	545
Partnership	1,247	1,488	2,501	2,705
Corporate activities	900	842	1,847	1,413
	<u>\$ 26,188</u>	<u>\$ 18,701</u>	<u>\$ 52,271</u>	<u>\$ 36,846</u>

The following table reconciles net income (loss) to EBITDA for the periods indicated (in thousands):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Net income (loss)	\$ (11,796)	\$ 12,985	\$ (10,145)	\$ (6,831)
Interest expense	19,430	10,499	37,926	21,297
Income tax expense (benefit)	(9,749)	5,471	(12,130)	(9,422)
Depreciation and amortization	26,188	18,701	52,271	36,846
EBITDA	<u>\$ 24,073</u>	<u>\$ 47,656</u>	<u>\$ 67,922</u>	<u>\$ 41,890</u>

The following table sets forth third-party revenues by product line (in thousands):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Revenues:				
Ethanol	\$ 607,693	\$ 572,394	\$ 1,205,100	\$ 1,071,445
Distillers grains	87,696	115,507	206,392	227,724
Corn oil	46,791	41,009	87,488	61,883
Grain	28,498	64,742	54,522	115,797
Food and ingredients	102,029	75,178	192,514	131,411
Service revenues	1,551	1,955	3,023	3,975
Other	12,005	16,942	24,908	24,696
	<u>\$ 886,263</u>	<u>\$ 887,727</u>	<u>\$ 1,773,947</u>	<u>\$ 1,636,931</u>

The following table sets forth total assets by operating segment (in thousands):

	June 30, 2017	December 31, 2016
Total assets (1):		
Ethanol production	\$ 1,138,707	\$ 1,206,155
Agribusiness and energy services	450,477	579,977
Food and ingredients	554,859	406,429
Partnership	75,123	74,999
Corporate assets	187,161	257,652
Intersegment eliminations	(9,704)	(18,720)
	<u>\$ 2,396,623</u>	<u>\$ 2,506,492</u>

(1) Asset balances by segment exclude intercompany receivable balances.

5. INVENTORIES

Inventories are carried at lower of cost or net realizable value , except for commodities held for sale and fair-value hedged inventories. Commodities held for sale are reported at market value .

The components of inventories are as follows (in thousands):

	June 30, 2017	December 31, 2016
Finished goods	\$ 89,020	\$ 99,009
Commodities held for sale	46,847	65,926
Raw materials	128,270	135,516
Work-in-process	147,589	91,093
Supplies and parts	33,012	30,637
	\$ 444,738	\$ 422,181

6. GOODWILL

The company did not have any changes in the carrying amount of goodwill, which was \$ 183.7 million at June 30, 2017 , and December 31, 2016 . Goodwill of \$ 30.3 million, \$142.8 million and \$ 10.6 million is attributable to the ethanol production segment , food and ingredient s segment and the partnership segment, respectively.

7. DERIVATIVE FINANCIAL INSTRUMENTS

At June 30, 2017 , the company's consolidated balance sheet reflected unrealized losses of \$10.4 million, net of tax, in accumulated other comprehensive income (loss). The company expects these losses will be reclassified in operating income over the next 12 months as a result of hedged transactions that are forecasted to occur. The amount realized in operating income will differ as commodity prices change.

Fair Values of Derivative Instruments

The fair values of the company's derivative financial instruments and the line items on the consolidated balance sheets where they are reported are as follows (in thousands):

	Asset Derivatives'		Liability Derivatives'	
	Fair Value		Fair Value	
	June 30, 2017	December 31, 2016	June 30, 2017	December 31, 2016
Derivative financial instruments (1)	\$ 3,041 (2)	\$ 14,818 (3)	\$ -	\$ -
Other assets	12	-	-	-
Accrued and other liabilities	-	-	8,165	27,099
Other liabilities	-	-	6	81
Total	\$ 3,053	\$ 14,818	\$ 8,171	\$ 27,180

(1) Derivative financial instruments as reflected on the consolidated balance sheets are net of related margin deposit assets of \$ 29.7 million and \$ 50.6 million at June 30, 2017 and December 31, 2016 , respectively.

(2) Balance at June 30, 2017 includes \$ 7.9 million of net unrealized losses on derivative financial instruments designated as cash flow hedging instruments.

(3) Balance at December 31, 2016 includes \$ 17.0 million of net unrealized losses on derivative financial instruments designated as cash flow hedging instruments.

Refer to *Note 3 - Fair Value Disclosures* , which contains fair value information related to derivative financial instruments.

Effect of Derivative Instruments on Consolidated Statements of Operations and Consolidated Statements of Stockholders' Equity and Comprehensive Income

The gains or losses recognized in income and other comprehensive income related to the company's derivative financial instruments and the line items on the consolidated financial statements where they are reported are as follows (in thousands):

Gains (Losses) on Derivative Instruments Not Designated in a Hedging Relationship	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenues	\$ (5,215)	\$ 10,065	\$ (10,263)	\$ 7,271
Cost of goods sold	3,284	(2,856)	15,220	(8,703)
Net increase (decrease) recognized in earnings before tax	\$ (1,931)	\$ 7,209	\$ 4,957	\$ (1,432)
Gains (Losses) Due to Ineffectiveness of Cash Flow Hedges	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenues	\$ (48)	\$ (38)	\$ (181)	\$ (38)
Cost of goods sold	-	(160)	-	(160)
Net decrease recognized in earnings before tax	\$ (48)	\$ (198)	\$ (181)	\$ (198)
Gains (Losses) Reclassified from Accumulated Other Comprehensive Income (Loss) into Net Income	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenues	\$ 2,825	\$ (13,470)	\$ 6,977	\$ (13,225)
Cost of goods sold	(648)	10,755	182	12,644
Net increase (decrease) recognized in earnings before tax	\$ 2,177	\$ (2,715)	\$ 7,159	\$ (581)
Effective Portion of Cash Flow Hedges Recognized in Other Comprehensive Income (Loss)	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Commodity Contracts	\$ (5,444)	\$ (7,689)	\$ (2,834)	\$ (5,407)
Gains (Losses) from Fair Value Hedges of Inventory	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenues (effect of change in inventory value)	\$ (31)	\$ (341)	\$ 1,390	\$ 1,419
Cost of goods sold (effect of change in inventory value)	(2,526)	13,080	(4,454)	8,182
Revenues (effect of fair value hedge)	(578)	341	(1,673)	(1,419)
Cost of goods sold (effect of fair value hedge)	2,406	(14,373)	5,445	(8,564)
Ineffectiveness recognized in earnings before tax	\$ (729)	\$ (1,293)	\$ 708	\$ (382)

There were no gains or losses from discontinuing cash flow or fair value hedge treatment during the three and six months ended June 30, 2017 and 2016 .

The open commodity derivative positions as of June 30, 2017 , are as follows (in thousands):

June 30, 2017					
Derivative Instruments	Exchange Traded	Non-Exchange Traded		Unit of Measure	Commodity
	Net Long & (Short) (1)	Long (2)	(Short) (2)		
Futures	(82,215)			Bushels	Corn, Soybeans and Wheat
Futures	(7,150) ⁽⁴⁾			Bushels	Corn
Futures	166,916			Gallons	Ethanol
Futures	(1,150)			MmBTU	Natural Gas
Futures	(12,143) ⁽⁴⁾			MmBTU	Natural Gas
Futures	3,140			Pounds	Livestock
Futures	(183,960) ⁽³⁾			Pounds	Livestock
Futures	(33)			Barrels	Crude Oil
Futures	(43) ⁽⁴⁾			Barrels	Crude Oil
Futures	(1,380)			Pounds	Soybean Oil
Futures	4,914 ⁽³⁾			Gallons	Natural Gasoline
Options	23,737			Bushels	Corn, Soybeans and Wheat
Options	(3,333)			Gallons	Ethanol
Options	347			MmBTU	Natural Gas
Options	(7,160)			Pounds	Livestock
Options	37			Barrels	Crude Oil
Options	(2,596)			Pounds	Soybean Oil
Forwards		26,713	(1,194)	Bushels	Corn and Soybeans
Forwards		74,010	(367,236)	Gallons	Ethanol
Forwards		158	(242)	Tons	Distillers Grains
Forwards		24,925	(128,199)	Pounds	Corn Oil
Forwards		14,438	(1,711)	MmBTU	Natural Gas
Forwards		93	(93)	Barrels	Crude Oil

(1) Exchange traded futures and options are presented on a net long and (short) position basis. Options are presented on a delta-adjusted basis.

(2) Non-exchange traded forwards are presented on a gross long and (short) position basis including both fixed-price and basis contracts.

(3) Futures used for cash flow hedges.

(4) Futures or non-exchange traded forwards used for fair value hedges.

Energy trading contracts that do not involve physical delivery are presented net in revenues on the consolidated statements of operations. Included in revenues are net gains on energy trading contracts of \$6.8 million and \$15.1 million for the three and six months ended June 30, 2017 , respectively, and net losses of \$0.3 million and net gains of \$3.0 million for the three and six months ended June 30, 2016 , respectively.

8. DEBT

The components of long-term debt are as follows (in thousands):

	<u>June 30,</u> <u>2017</u>	<u>December 31,</u> <u>2016</u>
Green Plains Processing:		
\$345.0 million term loan	\$ 264,401	\$ 294,011
Fleischmann's Vinegar:		
\$130.0 million term loan	125,312	125,609
\$15.0 million revolving credit facility	4,500	4,000
Green Plains Partners:		
\$155.0 million revolving credit facility	127,900	129,000
Corporate:		
\$120.0 million convertible notes due 2018	59,410	108,817
\$170.0 million convertible notes due 2022	130,215	127,239
Other	28,220	28,993
Total long-term debt	<u>739,958</u>	<u>817,669</u>
Less: current portion of long-term debt	<u>(6,178)</u>	<u>(35,059)</u>
Long-term debt	<u>\$ 733,780</u>	<u>\$ 782,610</u>

Short-term notes payable and other borrowings at June 30, 2017, include working capital revolvers at Green Plains Cattle, Green Plains Grain and Green Plains Trade with outstanding balances of \$145.0 million, \$ 112.0 million and \$ 84.5 million, respectively. Short-term notes payable and other borrowings at December 31, 2016, include working capital revolvers at Green Plains Cattle, Green Plains Grain and Green Plains Trade with outstanding balances of \$63.5 million, \$ 102.0 million and \$ 125.7 million, respectively.

Ethanol Production Segment

Green Plains Processing has a \$345.0 million senior secured credit facility, which is guaranteed by the company and subsidiaries of Green Plains Processing and secured by the stock and substantially all of the assets of Green Plains Processing. The interest rate is LIBOR, subject to a 1.00% floor, plus 5.50% and matures on June 30, 2020. The terms of the credit facility require the borrower to maintain a maximum total leverage ratio of 4.00x at the end of each quarter, decreasing to 3.25x over the life of the credit facility, and a minimum fixed charge coverage ratio of 1.25x. As of June 30, 2017, the maximum total leverage ratio was 3.75x. The credit facility also has a provision requiring the company to make special quarterly payments of 50% to 75% of its available free cash flow, subject to certain limitations.

At June 30, 2017, the interest rate on this term debt was 6.72%. Scheduled principal payments are \$0.9 million each quarter until maturity.

Agribusiness and Energy Services Segment

Green Plains Grain has a \$ 125.0 million senior secured asset-based revolving credit facility, to finance working capital up to the maximum commitment based on eligible collateral equal to the sum of percentages of eligible cash, receivables and inventories, less miscellaneous adjustments. The credit facility matures on July 26, 2019. Advances are subject to an interest rate equal to LIBOR plus 3.00% or the lenders' base rate plus 2.00%. The credit facility also includes an accordion feature that enables the facility to be increased by up to \$ 75.0 million with agent approval. The credit facility can also be increased by up to \$50.0 million for seasonal borrowings. Total commitments outstanding cannot exceed \$250.0 million.

Lenders receive a first priority lien on certain cash, inventory, accounts receivable and other assets owned by Green Plains Grain as security on the credit facility. The terms impose affirmative and negative covenants, including maintaining minimum working capital of \$20.0 million and tangible net worth of \$26.3 million for 2017. Capital expenditures are limited to \$8.0 million per year under the credit facility, plus equity contributions from the company and unused amounts of up to \$8.0 million from the previous year. In addition, the credit facility requires the company to maintain a minimum fixed charge coverage ratio of 1.25 to 1.00 and a maximum annual leverage ratio of 6.00 to 1.00 at the end of each quarter. The fixed charge coverage ratio and long-term capitalization ratio apply only if the company has long-term indebtedness on the date of

calculation. As of June 30, 2017, Green Plains Grain had no long-term indebtedness. The credit facility also contains restrictions on distributions related to capital stock, with exceptions for distributions up to 50% of net profit before tax, subject to certain conditions.

Green Plains Trade has a \$ 150.0 million senior secured asset-based revolving credit facility, which matures on November 26, 2019, to finance working capital for marketing and distribution activities based on eligible collateral equal to the sum of percentages of eligible receivables and inventories, less miscellaneous adjustments. Advances are subject to variable interest rates equal to LIBOR plus 2.50% or the base rate plus 1.50% . The unused portion of the credit facility is also subject to a commitment fee of 0.5% per annum.

The terms impose affirmative and negative covenants, including maintaining a fixed charge coverage ratio of 1.15x . Capital expenditures are limited to \$1.5 million per year under the credit facility. The credit facility also restricts distributions related to capital stock, with an exception for distributions up to 50% of net income if, on a pro forma basis, (a) availability has been greater than \$10.0 million for the last 30 days and (b) the borrower would be in compliance with the fixed charge coverage ratio on the distribution date.

On July 28 , 2017 , the company amended the credit facility, to increase the maximum commitment from \$150.0 million to \$300.0 million and extend the maturity date to July 28 , 2022 . The amended credit facility increases advance rates and modifies the eligible inventory definitions to include additional commodities and locations. Advances are subject to variable interest rates equal to a daily LIBOR rate plus 2.25% or the base rate plus 1.25% . The unused portion of the credit facility is also subject to a commitment fee of 0.375% per annum.

At June 30, 2017, Green Plains Trade had restricted cash of \$16.9 million on the consolidated balance sheet, the use of which was restricted for repayment towards the outstanding loan balance.

Food and Ingredients Segment

Green Plains Cattle has a senior secured asset-based revolving credit facility, to finance working capital for the cattle feedlot operations up to the maximum commitment based on eligible collateral equal to the sum of percentages of eligible receivables, inventories and other current assets, less miscellaneous adjustments. During the second quarter of 2017, the company amended its revolving credit facility to increase the maximum commitment from \$100.0 million to \$200.0 million until July 31, 2017, when it increased to \$300.0 million. The maturity date was extended from October 31, 2017, to April 30, 2020.

Advances, as amended, are subject to variable interest rates equal to LIBOR plus 2.00% to 3.00% , or the base rate plus 1.00% to 2.00% , depending upon the preceding three months' excess borrowing availability. The amended credit facility also includes an accordion feature that enables the credit facility to be increased by up to \$100.0 million with agent approval. The unused portion of the credit facility is also subject to a commitment fee of 0.20% to 0.30% per annum, depending on the preceding three months' excess borrowing availability.

Lenders receive a first priority lien on certain cash, inventory, accounts receivable, property and equipment and other assets owned by Green Plains Cattle as security on the credit facility. The amended terms impose affirmative and negative covenants, including maintaining working capital of 15% of the commitment amount, tangible net worth of 20% of the commitment amount, plus 50% of net profit from the previous year, and a total debt to tangible net worth ratio of 3.50x . Capital expenditures are limited to \$10.0 million per year under the credit facility, plus \$10.0 million per year if funded by a contribution from parent, plus any unused amounts from the previous year.

Fleischmann's Vinegar has a \$130.0 million senior secured term loan and a \$15.0 million senior secured revolving credit facility, which mature on October 3, 2022, to finance the purchase of Fleischmann's Vinegar and to fund working capital for its vinegar manufacturing operations. Beginning January 1, 2017, the term loan is subject to mandatory prepayments based on the preceding fiscal year's excess cash flow. Term loan prepayments are generally subject to prepayment fees of 1.0% to 2.0% if prepaid before the second anniversary of the credit agreement. The term loan and loans under the revolving credit facility each bear interest at a floating rate based on the consolidated total net leverage ratio, adjusted quarterly beginning September 30, 2017, to either a base rate plus an applicable margin of 5.0% to 6.0% or to LIBOR plus an applicable margin of 6.0% to 7.0% . The unused portion of the Revolving Loan Commitment is also subject to a commitment fee of 0.5% per annum.

The credit agreement contains certain customary representations and warranties, affirmative covenants, negative covenants, financial covenants and events of default. The negative covenants include restrictions on the ability to incur

additional indebtedness, acquire and sell assets, create liens, make investments, make distributions and enter into transactions with affiliates. The financial covenants include requirements to maintain a minimum consolidated fixed charge coverage ratio ranging from 1.00x to 1.10x and a maximum consolidated total net leverage ratio ranging from 5.00x to 7.00x. The consolidated fixed charge coverage ratio is calculated by summing the four preceding fiscal quarters' EBITDA less capital expenditures and dividing that sum by the sum of the four preceding fiscal quarters' cash interest and taxes, scheduled principal payments and parent management fees. The consolidated total net leverage ratio is calculated by dividing total net indebtedness by the sum of the four preceding fiscal quarters' EBITDA. Beginning in 2017, the credit facility also has a provision requiring the company to make special annual payments of 0% to 50% of its available free cash flow, subject to certain limitations.

Partnership Segment

Green Plains Partners, through a wholly owned subsidiary, has a \$155.0 million revolving credit facility, as amended, which matures on July 1, 2020, to fund working capital, acquisitions, distributions, capital expenditures and other general partnership purposes. Advances under the credit facility are subject to a floating interest rate based on the preceding fiscal quarter's consolidated leverage ratio at a base rate plus 1.25% to 2.00% or LIBOR plus 2.25% to 3.00%. The credit facility may be increased up to \$100.0 million without the consent of the lenders. The unused portion of the credit facility is also subject to a commitment fee of 0.35% to 0.50%, depending on the preceding fiscal quarter's consolidated leverage ratio.

The partnership's obligations under the credit facility are secured by a first priority lien on (i) the capital stock of the partnership's present and future subsidiaries, (ii) all of the partnership's present and future personal property, such as investment property, general intangibles and contract rights, including rights under agreements with Green Plains Trade, and (iii) all proceeds and products of the equity interests of the partnership's present and future subsidiaries and its personal property. The terms impose affirmative and negative covenants including restricting the partnership's ability to incur additional debt, acquire and sell assets, create liens, invest capital, pay distributions and materially amend the partnership's commercial agreements with Green Plains Trade. The credit facility also requires the partnership to maintain a maximum consolidated net leverage ratio of no more than 3.50x, and a minimum consolidated interest coverage ratio of no less than 2.75x, each of which is calculated on a pro forma basis with respect to acquisitions and divestitures occurring during the applicable period.

Corporate Activities

In August 2016, the company issued \$170.0 million of 4.125% convertible senior notes due 2022. The 4.125% notes are senior, unsecured obligations of the company, with interest payable on March 1 and September 1 of each year. The company may settle the 4.125% notes in cash, common stock or a combination of cash and common stock.

Prior to March 1, 2022, the 4.125% notes are not convertible unless certain conditions are satisfied. The conversion rate is subject to adjustment upon the occurrence of certain events, including when the quarterly cash dividend exceeds \$0.12 per share and upon redemption of the 4.125% notes. The initial conversion rate is 35.7143 shares of common stock per \$1,000 of principal, which is equal to a conversion price of approximately \$28.00 per share.

The company may redeem all, but not less than all, of the 4.125% notes at any time on or after September 1, 2020, if the company's common stock equals or exceeds 140% of the applicable conversion price for a specified time period ending on the trading day immediately prior to the date the company delivers notice of the redemption. The redemption price will equal 100% of the principal plus any accrued and unpaid interest. Holders of the 4.125% notes have the option to require the company to repurchase the 4.125% notes in cash at a price equal to 100% of the principal plus accrued and unpaid interest when there is a fundamental change, such as change in control. If an event of default occurs, it could result in the 4.125% notes being declared due and payable.

In September 2013, the company issued \$120.0 million of 3.25% convertible senior notes due 2018. The 3.25% notes are senior, unsecured obligations of the company, with interest payable on April 1 and October 1 of each year. The company may settle the 3.25% notes in cash, common stock or a combination of cash and common stock.

Prior to April 1, 2018, the 3.25% notes are not convertible unless certain conditions are satisfied. The conversion rate is subject to adjustment when the quarterly cash dividend exceeds \$0.04 per share. The conversion rate was recently adjusted to 49.7602 shares of common stock per \$1,000 of principal, which is equal to a conversion price of approximately \$20.10 per share. The company may be obligated to increase the conversion rate in certain events, including redemption of the 3.25% notes.

The company may redeem all of the 3.25% notes at any time, if the company's common stock equals or exceeds 140% of the applicable conversion price for a specified time period ending on the trading day immediately prior to the date the company delivers notice of the redemption. The redemption price will equal 100% of the principal plus any accrued and unpaid interest. Holders of the 3.25% notes have the option to require the company to repurchase the 3.25% notes in cash at a price equal to 100% of the principal plus accrued and unpaid interest when there is a fundamental change, such as change in control. If an event of default occurs, it could result in the 3.25% notes being declared due and payable.

During the second quarter of 2017, the company entered into several privately negotiated agreements with holders, on behalf of certain beneficial owners of the company's 3.25% notes. Under these agreements, 2,783,725 shares of the company's common stock and approximately \$8.5 million in cash plus accrued but unpaid interest on the 3.25% notes, were exchanged for approximately \$56.3 million in aggregate principal amount of the 3.25% notes. Common stock held as treasury shares were exchanged for the 3.25% notes. Following the closings of the agreements, \$63.7 million aggregate principal amount of the 3.25% notes remain outstanding.

At issuance, the company separately accounted for the liability and equity components of the convertible notes by bifurcating the gross proceeds between the indebtedness, or liability component, and the embedded conversion option, or equity component. This bifurcation was done by estimating an effective interest rate on the date of issuance for similar notes. The embedded conversion option was recorded in stockholders' equity. Since the company did not exercise the embedded conversion option associated with the notes, pursuant to the guidance within ASC Topic 470, *Debt*, the company recorded a loss upon extinguishment measured by the difference between the fair value and carrying value of the liability portion of the notes. As a result, the company recorded a charge to interest expense in the consolidated financial statements of approximately \$1.3 million during the three months ended June 30, 2017. This charge also included \$0.6 million of unamortized debt issuance costs related to the principal balance extinguished. The remaining settlement consideration transferred was allocated to the reacquisition of the embedded conversion option and recognized as a reduction of additional paid-in capital.

Covenant Compliance

The company was in compliance with its debt covenants as of June 30, 2017.

Capitalized Interest

The company had \$12 thousand and \$23 thousand of capitalized interest during the three and six months ended June 30, 2017, respectively, and \$559 thousand and \$917 thousand during the three and six months ended June 30, 2016, respectively.

Restricted Net Assets

At June 30, 2017, there were approximately \$790.5 million of net assets at the company's subsidiaries that could not be transferred to the parent company in the form of dividends, loans or advances due to restrictions contained in the credit facilities of these subsidiaries.

9. STOCK-BASED COMPENSATION

The company has an equity incentive plan that reserves 4,110,000 shares of common stock for issuance to its directors and employees. The plan provides for shares, including options to purchase shares of common stock, stock appreciation rights tied to the value of common stock, restricted stock, and restricted and deferred stock unit awards, to be granted to eligible employees, non-employee directors and consultants. The company measures stock-based compensation at fair value on the grant date, adjusted for estimated forfeitures. The company records noncash compensation expense related to equity awards in its consolidated financial statements over the requisite period on a straight-line basis. Substantially all of the existing stock-based compensation has been equity awards.

The activity related to the exercisable stock options for the six months ended June 30, 2017 , is as follows:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2016	148,750	\$ 12.36	2.8	\$ 2,305
Granted	-	-	-	-
Exercised	(5,000)	10.00	-	78
Forfeited	-	-	-	-
Expired	-	-	-	-
Outstanding at June 30, 2017	143,750	\$ 12.44	2.3	\$ 1,166
Exercisable at June 30, 2017 (1)	143,750	\$ 12.44	2.3	\$ 1,166

(1) Includes in-the-money options totaling 143,750 shares at a weighted-average exercise price of \$ 12.44 .

Option awards allow employees to exercise options through cash payment for the shares of common stock or simultaneous broker-assisted transactions in which the employee authorizes the exercise and immediate sale of the options in the open market. The company uses newly issued shares of common stock to satisfy its stock-based payment obligations.

The non-vested stock award and deferred stock unit activity for the six months ended June 30, 2017 , is as follows:

	Non-Vested Shares and Deferred Stock Units	Weighted- Average Grant- Date Fair Value	Weighted-Average Remaining Vesting Term (in years)
Non-Vested at December 31, 2016	1,139,560	\$ 17.65	
Granted	531,103	24.38	
Forfeited	(41,317)	19.07	
Vested	(503,983)	18.42	
Non-Vested at June 30, 2017	1,125,363	\$ 20.43	2.1

Green Plains Partners

Green Plains Partners has adopted the LTIP, an incentive plan intended to promote the interests of the partnership, its general partner and affiliates by providing incentive compensation based on units to employees, consultants and directors to encourage superior performance. The incentive plan reserves 2,500,000 common units for issuance in the form of options, restricted units, phantom units, distributable equivalent rights, substitute awards, unit appreciation rights, unit awards, profits interest units or other unit-based awards. The partnership measures unit-based compensation related to equity awards in its consolidated financial statements over the requisite service period on a straight-line basis.

The non-vested unit-based awards activity for the six months ended June 30, 2017 , is as follows:

	Non-Vested Shares and Deferred Stock Units	Weighted- Average Grant- Date Fair Value	Weighted-Average Remaining Vesting Term (in years)
Non-Vested at December 31, 2016	15,009	\$ 15.99	
Granted	-	-	
Forfeited	-	-	
Vested	(15,009)	15.99	
Non-Vested at June 30, 2017	-	\$ -	0.0

Compensation costs for stock-based and unit-based payment plans during the three and six months ended June 30, 2017 , were approximately \$ 3.0 million and \$5.5 million , respectively , and \$ 2.4 million and \$4.6 million during the three and six months ended June 30, 2016, respectively . At June 30, 2017 , there was \$ 18.8 million of unrecognized compensation costs

from stock-based and unit-based compensation related to non-vested awards. This compensation is expected to be recognized over a weighted-average period of approximately 2.1 years. The potential tax benefit related to stock-based payment is approximately 37.7 % of these expenses.

10. EARNINGS PER SHARE

Basic earnings per share, or EPS, is calculated by dividing net income available to common stockholders by the weighted average number of common shares outstanding during the period.

During 2016, diluted EPS was computed using the treasury stock method for the convertible debt instruments, by dividing net income by the weighted average number of common shares outstanding during the period, adjusted for the dilutive effect of the convertible debt instruments and any other outstanding dilutive securities. During the first quarter of 2017, the company changed its method for calculating dilutive EPS related to its convertible debt instruments from the treasury stock method to the if-converted method, as the company changed its financial strategy with respect to cash settlement of these instruments. As such, the company computed diluted EPS for 2017 by dividing net income on an if-converted basis, by the weighted average number of common shares outstanding during the period, adjusted to include the shares that would be issued if the convertible debt instruments were converted to common shares and the effect of any outstanding dilutive securities. Under the if-converted method for 2017, excluded from the computation of diluted EPS were 10.6 million shares and 11.3 million shares for the three and six months ended June 30, 2017, respectively, and an adjustment to net income of \$3.2 million and \$6.8 million for interest expense, net of taxes, for the three and six months ended June 30, 2017, respectively, as the inclusion of these adjustments would have been antidilutive.

Also excluded from the calculation were 65 thousand shares and 68 thousand shares for the three and six months ended June 30, 2017, respectively, and 119 thousand shares for the six months ended June 30, 2016, related to the effect of stock-based compensation awards, as inclusion of these shares would have been antidilutive.

The basic and diluted EPS are calculated as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Basic EPS:				
Net income (loss) attributable to Green Plains	\$ (16,366)	\$ 8,191	\$ (19,963)	\$ (15,947)
Weighted average shares outstanding - basic	40,220	38,425	39,326	38,311
EPS - basic	\$ (0.41)	\$ 0.21	\$ (0.51)	\$ (0.42)
Diluted EPS:				
Net income (loss) attributable to Green Plains - diluted	\$ (16,366)	\$ 8,191	\$ (19,963)	\$ (15,947)
Weighted average shares outstanding - basic	40,220	38,425	39,326	38,311
Effect of dilutive convertible debt:				
3.25% notes	-	-	-	-
4.125% notes	-	-	-	-
Effect of dilutive stock-based compensation awards	-	111	-	-
Weighted average shares outstanding - diluted	40,220	38,536	39,326	38,311
EPS - diluted	\$ (0.41)	\$ 0.21	\$ (0.51)	\$ (0.42)

11. STOCKHOLDERS' EQUITY

Components of stockholders' equity are as follows (in thousands):

	Common Stock		Additional Paid-in Capital	Retained Earnings	Accum. Other Comp. Income (Loss)	Treasury Stock		Total Green Plains Stockholders' Equity	Non- Controlling Interests	Total Stockholders' Equity
	Shares	Amount				Shares	Amount			
Balance, December 31, 2016	46,079	\$ 46	\$ 659,200	\$ 283,214	\$ (4,137)	7,715	\$ (75,816)	\$ 862,507	\$ 116,684	\$ 979,191
Net income (loss)	-	-	-	(19,963)	-	-	-	(19,963)	9,818	(10,145)
Cash dividends and distributions declared	-	-	-	(9,221)	-	-	-	(9,221)	(10,023)	(19,244)
Other comprehensive loss, before reclassification	-	-	-	-	(1,776)	-	-	(1,776)	-	(1,776)
Amounts reclassified from accumulated other comprehensive loss	-	-	-	-	(4,487)	-	-	(4,487)	-	(4,487)
Other comprehensive loss, net of tax	-	-	-	-	(6,263)	-	-	(6,263)	-	(6,263)
Exchange of 3.25% convertible notes due 2018	-	-	18,326	-	-	(2,784)	27,356	45,682	-	45,682
Stock-based compensation	332	-	1,577	-	-	-	-	1,577	119	1,696
Stock options exercised	5	-	50	-	-	-	-	50	-	50
Balance, June 30, 2017	46,416	\$ 46	\$ 679,153	\$ 254,030	\$ (10,400)	4,931	\$ (48,460)	\$ 874,369	\$ 116,598	\$ 990,967

Amounts reclassified from accumulated other comprehensive income are as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,		Statements of Operations Classification
	2017	2016	2017	2016	
Gains on cash flow hedges:					
Commodity derivatives	\$ 2,825	\$ (13,470)	\$ 6,977	\$ (13,225)	Revenues
Commodity derivatives	(648)	10,755	182	12,644	Cost of goods sold
Total	2,177	(2,715)	7,159	(581)	Income (loss) before income taxes
Income tax expense (benefit)	824	(932)	2,672	(225)	Income tax expense (benefit)
Amounts reclassified from accumulated other comprehensive income (loss)	\$ 1,353	\$ (1,783)	\$ 4,487	\$ (356)	

12. INCOME TAXES

The company records actual income tax expense or benefit during interim periods rather than on an annual effective tax rate method. Certain items are given discrete period treatment and the tax effect of those items are reported in full in the relevant interim period. Green Plains Partners is a limited partnership, which is treated as a flow-through entity for federal income tax purposes and is not subject to federal income taxes. As a result, the consolidated financial statements do not reflect such income taxes on pre-tax income or loss attributable to the noncontrolling interest in the partnership.

The amount of unrecognized tax benefits for uncertain tax positions was \$0.2 million as of June 30, 2017, and December 31, 2016. Recognition of these benefits would have a favorable impact on the company's effective tax rate.

The 2017 effective tax rate can be affected by variances among the estimates and amounts of taxable income among the various states, entities and activity types, realization of tax credits, adjustments from resolution of tax matters under review, valuation allowances and the company's assessment of its liability for uncertain tax positions.

13. COMMITMENTS AND CONTINGENCIES

Operating Leases

The company leases certain facilities, equipment and parcels of land under agreements that expire at various dates. For accounting purposes, rent expense is based on a straight-line amortization of the total payments required over the lease. The company incurred lease expenses of \$ 11.9 million and \$22.2 million during the three and six months ended June 30, 2017, respectively, and \$8.7 million and \$18.1 million during the three and six months ended June 30, 2016, respectively.

Aggregate minimum lease payments under these agreements for the remainder of 2017 and in future years are as follows (in thousands):

Year Ending December 31,	Amount
2017	\$ 19,266
2018	28,560
2019	19,209
2020	13,226
2021	6,464
Thereafter	21,950
Total	\$ 108,675

Commodities

As of June 30, 2017, the company had contracted future purchases of grain, corn oil, natural gas, crude oil, ethanol, distillers grains and cattle, valued at approximately \$ 470.7 million.

Legal

In November 2013, the company acquired two ethanol plants located in Fairmont, Minnesota and Wood River, Nebraska. There is ongoing litigation related to the consideration for this acquisition. On August 19, 2016, the Delaware Superior Court granted Green Plains' motion for summary judgment in part and held that the seller's attempt to disclaim liability for certain shortfall amounts through the use of a disclaimer provision was ineffective. Based on the court order, the company determined that previously accrued contingent liabilities of approximately \$6.3 million no longer represented probable losses. These accruals were reversed as a reduction of cost of goods sold during the year ended December 31, 2016, because the adjustment relates to a reduction in the cost of inventory purchased in the acquisitions. The court has directed the company and the seller to work together to determine the precise total of the shortfall amount due to Green Plains. The company believes the remaining amount due to Green Plains is approximately \$5.5 million; however, the seller has the right to dispute the details of the calculation and appeal the underlying Superior Court order. Accordingly, the total amount Green Plains may receive is yet to be determined. The remaining amount due to the company represents a gain contingency which will not be recorded until all contingencies are resolved.

In addition to the above-described proceeding, the company is currently involved in litigation that has arisen in the ordinary course of business, but does not believe any pending litigation will have a material adverse effect on its financial position, results of operations or cash flows.

14. RELATED PARTY TRANSACTIONS

Commercial Contracts

Three subsidiaries of the company have executed separate financing agreements for equipment with Amur Equipment Finance. Gordon Glade, a member of the company's board of directors, is a shareholder of Amur Equipment Finance. Balances of approximately \$ 696 thousand and \$808 thousand related to these financing arrangements were included in debt at June 30, 2017, and December 31, 2016, respectively. Payments, including principal and interest, totaled \$ 69 thousand and \$138 thousand during each of the three and six months ended June 30, 2017 and 2016, respectively. The weighted average interest rate for the financing agreements with Amur Equipment Finance was 6.8%.

Aircraft Leases

Effective January 1, 2015, the company entered into two agreements with an entity controlled by Wayne Hoovestol for the lease of two aircrafts. Mr. Hoovestol is chairman of the company's board of directors. The company agreed to pay \$ 9,766 per month for the combined use of up to 125 hours per year of the aircrafts. Flight time in excess of 125 hours per year will incur additional hourly charges . Payments related to these leases totaled \$41 thousand and \$102 thousand during the three and six months ended June 30, 2017 , respectively, and \$40 thousand and \$88 thousand during the three and six months ended June 30, 2016 , respectively. The company had \$3 thousand in outstanding payables related to these agreements at June 30, 2017 , and no outstanding payables related to these agreements at December 31, 2016 .

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

General

The following discussion and analysis provides information we believe is relevant to understand our consolidated financial condition and results of operations. This discussion should be read in conjunction with the consolidated financial statements and notes to the consolidated financial statements contained in this report together with our annual report on Form 10-K for the year ended December 31, 2016.

Cautionary Information Regarding Forward-Looking Statements

Forward-looking statements are made in accordance with safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements are based on current expectations that involve a number of risks and uncertainties and do not relate strictly to historical or current facts, but rather to plans and objectives for future operations. These statements may be identified by words such as “anticipate,” “believe,” “continue,” “estimate,” “expect,” “intend,” “outlook,” “plan,” “predict,” “may,” “could,” “should,” “will” and similar expressions, as well as statements regarding future operating or financial performance or guidance, business strategy, environment, key trends and benefits of actual or planned acquisitions.

Factors that could cause actual results to differ from those expressed or implied in the forward-looking statements include, but are not limited to, those discussed in Part I, Item 1A – Risk Factors of our annual report on Form 10-K for the year ended December 31, 2016, or incorporated by reference. Specifically, we may experience significant fluctuations in future operating results due to a number of economic conditions, including: competition in the ethanol industry and other industries in which we operate; commodity market risks including those that may result from weather conditions; financial market risks; counterparty risks; risks associated with changes to government policy or regulation, risks related to acquisitions and achieving anticipated results; risks associated with merchant trading, cattle feeding operations, vinegar production and other risk factors detailed in reports filed with the SEC. Additional risks related to Green Plains Partners LP include compliance with commercial contractual obligations, potential tax consequences related to our investment in the partnership and risks disclosed in the partnership’s SEC filings associated with the operation of the partnership as a separate, publicly traded entity.

We believe our expectations regarding future events are based on reasonable assumptions; however, these assumptions may not be accurate or account for all risks and uncertainties. Consequently, forward-looking statements are not guaranteed. Actual results may vary materially from those expressed or implied in our forward-looking statements. In addition, we are not obligated, nor do we intend to update our forward-looking statements as a result of new information unless it is required by applicable securities laws. We caution investors not to place undue reliance on forward-looking statements, which represent management’s views as of the date of this report or documents incorporated by reference.

Overview

Green Plains is a diversified commodity-processing business with operations related to ethanol production, grain handling and storage, cattle feedlots, food ingredients, and commodity marketing and logistics services. We are focused on generating stable operating margins through our diversified business segments and risk management strategy. Green Plains Partners LP is our primary downstream logistics provider, storing and delivering the ethanol we produce. We own a 62.5% limited partner interest, a 2.0% general partner interest and all of the partnership’s incentive distribution rights. The public owns the remaining 35.5% limited partner interest. The partnership is consolidated in our financial statements.

Recent Developments

On March 16, 2017, we acquired the assets of a cattle-feeding operation located approximately 20 miles from our Hereford, Texas ethanol facility. The operation has the capacity to support 30,000 head of cattle and is included as part of our food and ingredients segment.

On May 16, 2017, we acquired two cattle-feeding operations from Cargill Cattle Feeders, LLC for \$57.7 million, including certain working capital adjustments. The transaction included the feed yards located in Leoti, Kansas and Yuma, Colorado and added combined feedlot capacity of 155,000 head of cattle to our operations. The transaction was financed using cash on hand. As part of the transaction, we entered into a long-term cattle supply agreement with Cargill Meat Solutions Corporation. Under the cattle supply agreement, all cattle placed in the Leoti, Yuma and our existing Kismet, Kansas feedlots will be sold exclusively to Cargill Meat Solutions under an agreed upon production and pricing arrangement.

On April 28, 2017, we entered into an amendment of our Green Plains Cattle senior secured asset-based revolving credit facility with a group of lenders led by Bank of the West and ING Capital LLC. The amendment was completed to fund the anticipated additional working capital requirements related to the acquisition of two cattle feedlots. The amendment increased the maximum commitment from \$100.0 million to \$200.0 million until July 31, 2017, when it increased to \$300.0 million. The maturity date was extended from October 31, 2017 to April 30, 2020 among other amendments.

During the second quarter of 2017, we entered into several privately negotiated agreements with holders, on behalf of certain beneficial owners, of our 3.25% notes. Under these agreements, 2,783,725 shares of our common stock and approximately \$8.5 million in cash plus accrued but unpaid interest on the 3.25% notes, were exchanged for approximately \$56.3 million in aggregate principal amount of the 3.25% notes. Following the closing of the agreement, \$63.7 million aggregate principal amount of the 3.25% notes remain outstanding. We recorded a charge to interest expense in the consolidated financial statements for the loss on debt extinguishment of approximately \$1.3 million during the three months ended June 30, 2017.

On July 28, 2017, we amended our Green Plains Trade senior secured asset-based revolving credit facility, to increase the maximum commitment from \$150.0 million to \$300.0 million and extend the maturity date to July 28, 2022. The amended credit facility increases advance rates and modifies the eligible inventory definitions to include additional commodities and locations. Advances are subject to variable interest rates equal to a daily LIBOR rate plus 2.25% or the base rate plus 1.25%. The unused portion of the credit facility is also subject to a commitment fee of 0.375% per annum.

On June 13, 2016, we formed a 50/50 joint venture to construct and operate an intermodal export and import fuels terminal at Jefferson Gulf Coast Energy Partners' existing Beaumont, Texas terminal. Phase I development of the joint venture is expected to be completed in October of 2017. We will offer our interest in the joint venture to the partnership once commercial development is complete.

Results of Operations

We operated our ethanol production facilities at approximately 74.7% of capacity, resulting in ethanol production of 275.5 mmg for the second quarter of 2017, compared with 274.3 mmg, or 89.8% of capacity, for the same quarter last year. Ethanol production capacity was increased with our acquisitions of the Madison, Illinois, Mount Vernon, Indiana, and York, Nebraska plants, acquired on September 23, 2016. We reduced our production capacity utilization in response to a weak ethanol margin environment during the quarter.

Industry Trends and Factors Affecting our Results of Operations

According to the EIA, average daily domestic ethanol production slowed to 1.00 million barrels per day during the second quarter of 2017, down slightly from 1.04 million barrels per day during the first quarter of 2017, due in part to plant shutdowns for routine maintenance. Average daily production, however, increased 4% during the second quarter of 2017 compared with the same quarter last year and 5% for the first half of 2017 compared with the first half of 2016 due to modest domestic production capacity growth. Weekly refiner and blender input volume increased by nearly 2% during the first half of the year compared with the first half of 2016, helped by the growing number of retail gasoline stations offering higher ethanol blends to consumers. According to Growth Energy, nearly 920 retail stations were selling E15 at July 11, 2017, up from 431 stations at December 31, 2016.

Year-to-date domestic ethanol exports through May 31, 2017, were 594.0 mmg, up 48%, from 400.7 mmg for the comparable period in 2016. Brazil accounted for 43% of the domestic ethanol export volumes, while Canada, India, the Philippines and United Arab Emirates accounted for 21%, 12%, 7% and 4%, respectively. China, the number three importer of U.S. ethanol last year, has imported negligible volumes year-to-date due to a 30% tariff imposed on U.S. and Brazil fuel ethanol, which took effect on January 1, 2017. On July 26, 2017, Brazil's Chamber of Foreign Trade, or CAMEX, announced it would delay its decision on a pending proposal to impose a 20% tariff on U.S. ethanol imports until next month. We currently estimate that net ethanol exports will reach between 1.1 billion gallons and 1.3 billion gallons in 2017.

Average weekly gasoline demand slowed 1.3% during the second quarter of 2017 and 2.1% for the first half of the year compared with the same periods in 2016. Gasoline futures traded at a discount to ethanol futures in May and June of 2017.

On June 27, 2017, the Energy Regulatory Commission of Mexico approved the use of 10% ethanol blends, effective immediately, up from 5.8%, in all but three of its largest cities: Mexico City, Guadalajara and Monterrey. U.S. ethanol exports to Mexico totaled 29 mmg in 2016.

Year-to-date U.S. distillers grains exports through May 31, 2017, were 4.7 million metric tons, or 7% higher than year-to-date distillers grains exports through May 31, 2016. Mexico, Turkey, South Korea, China, Thailand and Canada accounted for 62% of total U.S. distillers export volumes, according to the EIA.

At June 30, 2017, domestic ethanol inventory of 21.6 million barrels was 0.4 million barrels higher than the ending stocks at the same time last year, implying that increased export volumes have offset the difference between increased production and blending volumes year over year.

On June 14, 2017, the Senate Environment and Public Works Committee held a hearing about the Consumer and Fuel Retailer Choice Act (S. 517). The bill was introduced to the Senate and House of Representatives (H.R. 1311) on March 2, 2017, proposing to lift restrictions on the sale of gasoline blended with 15% ethanol between June 1 and September 15 by extending the RVP waiver to E15. The RVP waiver would allow the sale of E15 in a manner consistent with E10 year-round, potentially reducing consumer confusion.

On July 5, 2017, the EPA proposed maintaining the RVOs for conventional ethanol at 15.0 billion gallons, in line with our expectations, while lowering the volume obligations for advanced alternatives, reducing the overall biofuel target to 19.24 billion gallons in 2018. According to RFS II, if mandatory renewable fuel volumes are reduced by at least 20% for two consecutive years, the EPA is required to modify, or reset, statutory volumes through 2022. With the 2018 being the first year the total proposed RVOs are more than 20% below statutory levels, the Administrator has directed the EPA staff to initiate the required technical analysis to inform a reset rule. If 2019 RVOs are also more than 20% below statutory levels, an RVO reset will be triggered under RFS II. This will require the EPA to modify statutory volumes through 2022 within one year of the trigger event, with the standard for review based on the same factors to be utilized when the EPA sets RVOs post-2022.

The U. S. Federal District Court for the D. C. Circuit ruled on July 28, 2017 in favor of the Americans for Clean Energy and its aligned petitioners against the EPA. The decision concluded the EPA erred in how it interpreted the “inadequate domestic supply” waiver provision of RFS II which authorizes the EPA to consider supply-side factors affecting the volume of renewable fuel that is available to refiners, blenders, and importers to meet the statutory volume requirements, but as the Court concluded it does not allow the EPA to consider the volume of renewable fuel that is available to ultimate consumers or the demand-side constraints that affect the consumption of renewable fuel by consumers. As a result, the Court vacated the EPA’s decision to reduce the total renewable fuel volume requirements for 2016 through use of its “inadequate domestic supply” waiver authority, and remanded to the EPA to address the 2016 total renewable fuels volume requirements. While we anticipate no direct impact from the decision, we expect the primary impact will be on the RINs market. However we believe it should benefit our industry overall with the EPA's waiver analysis now limited to the supply-side of the equation only.

World demand for U.S. beef has risen as diets continue to improve worldwide to include increased animal protein. In June of 2017, the United States resumed exporting beef to China, following a 13-year ban the Trump Administration lifted as part of a new bilateral agreement between the countries.

Comparability of our Financial Results

As a result of acquisitions during 2016, we implemented segment organizational changes during the fourth quarter of 2016, whereby we now report the financial and operating performance in the following four operating segments: (1) ethanol production, which includes the production of ethanol, distillers grains and corn oil, (2) agribusiness and energy services, which includes grain handling and storage and marketing and merchant trading for company-produced and third-party ethanol, distillers grains, corn oil, natural gas and other commodities, (3) food and ingredients, which includes cattle feedlots, vinegar production and food-grade corn oil operations and (4) partnership, which includes fuel storage and transportation services. Prior periods have been reclassified to conform to the revised segment presentation.

We have re-evaluated the profitability measure of our reportable segment’s operating performance and have determined that segment EBITDA (earnings before interest, taxes, depreciation and amortization) is primarily used by our management to evaluate segment operating activities, and therefore is a more meaningful profitability measure than the previously reported segment operating income. In addition, EBITDA is a financial measure that is widely used by analysts and investors in our industries. As a result, we are now including segment EBITDA as a performance measure.

Effective April 1, 2016, we increased our ownership of BioProcess Algae, a joint venture formed in 2008, to 82.8% and currently own approximately 90.0%. Beginning April 1, 2016, we consolidate the financial results of BioProcess Algae, and record a noncontrolling interest for the economic interest in the joint venture held by others.

On September 23, 2016, we acquired three ethanol production facilities located in Madison, Illinois, Mount Vernon, Indiana, and York, Nebraska, with combined annual production capacity of approximately 230 mmgy.

On October 3, 2016, we acquired Fleischmann's Vinegar, one of the world's largest producers of food-grade industrial vinegar which includes seven production facilities and four distribution warehouses.

On March 16, 2017, we acquired the assets of a cattle-feeding operation located in Hereford, Texas, which added a combined feedlot capacity of 30,000 head of cattle to our operations.

On May 16, 2017, we acquired two cattle feed yards in Leoti, Kansas and Yuma, Colorado, which added a combined feedlot capacity of 155,000 head of cattle to our operations.

Corporate activities include selling, general and administrative expenses, consisting primarily of compensation, professional fees and overhead costs not directly related to a specific operating segment.

During the normal course of business, our operating segments do business with each other. For example, our agribusiness and energy services segment procures grain and natural gas and sells products, including ethanol, distillers grains and corn oil of our ethanol production segment. Our partnership segment provides fuel storage and transportation services for our agribusiness and energy services segment. These intersegment activities are treated like third-party transactions with origination, marketing and storage fees charged at estimated market values. Consequently, these transactions affect segment performance; however, they do not impact our consolidated results since the revenues and corresponding costs are eliminated.

We, together with our subsidiaries, own a 62.5% limited partner interest and a 2.0% general partner interest in the partnership and own all of the partnership's incentive distribution rights, with the remaining 35.5% limited partner interest owned by public common unitholders. We consolidate the financial results of the partnership, and record a noncontrolling interest for the economic interest in the partnership held by the public common unitholders.

Segment Results

The selected operating segment financial information are as follows (in thousands):

	Three Months Ended			Six Months Ended		
	June 30,		%	June 30,		%
	2017	2016	Variance	2017	2016	Variance
Revenues:						
Ethanol production:						
Revenues from external customers	\$ 617,297	\$ 595,168	3.7%	\$ 1,237,176	\$ 1,123,496	10.1%
Intersegment revenues	1,549	-	*	3,045	-	*
Total segment revenues	618,846	595,168	4.0	1,240,221	1,123,496	10.4
Agribusiness and energy services:						
Revenues from external customers	150,755	203,158	(25.8)	319,066	363,303	(12.2)
Intersegment revenues	9,781	8,589	13.9	19,273	15,998	20.5
Total segment revenues	160,536	211,747	(24.2)	338,339	379,301	(10.8)
Food and ingredients:						
Revenues from external customers	116,660	87,446	33.4	214,682	146,157	46.9
Intersegment revenues	37	38	(2.6)	75	75	0.0
Total segment revenues	116,697	87,484	33.4	214,757	146,232	46.9
Partnership:						
Revenues from external customers	1,551	1,955	(20.7)	3,023	3,975	(23.9)
Intersegment revenues	23,514	23,538	(0.1)	49,271	45,306	8.8
Total segment revenues	25,065	25,493	(1.7)	52,294	49,281	6.1
Revenues including intersegment activity	921,144	919,892	0.1	1,845,611	1,698,310	8.7
Intersegment eliminations	(34,881)	(32,165)	8.4	(71,664)	(61,379)	16.8
Revenues as reported	\$ 886,263	\$ 887,727	(0.2%)	\$ 1,773,947	\$ 1,636,931	8.4%

	Three Months Ended			Six Months Ended		
	June 30,		% Variance	June 30,		% Variance
	2017	2016		2017	2016	
Cost of goods sold:						
Ethanol production	\$ 612,646	\$ 565,438	8.3%	\$ 1,211,784	\$ 1,099,936	10.2%
Agribusiness and energy services	152,110	195,077	(22.0)	318,504	354,492	(10.2)
Food and ingredients	100,009	81,041	23.4	183,044	140,295	30.5
Partnership	-	-	*	-	-	*
Intersegment eliminations	(34,746)	(32,032)	8.5	(71,417)	(60,512)	18.0
	<u>\$ 830,019</u>	<u>\$ 809,524</u>	<u>2.5%</u>	<u>\$ 1,641,915</u>	<u>\$ 1,534,211</u>	<u>7.0%</u>

	Three Months Ended			Six Months Ended		
	June 30,		% Variance	June 30,		% Variance
	2017	2016		2017	2016	
Operating income (loss):						
Ethanol production	\$ (22,459)	\$ 7,558	*	\$ (29,057)	\$ (22,007)	32.0%
Agribusiness and energy services	3,083	9,766	(68.4%)	9,452	13,503	(30.0)
Food and ingredients	10,714	5,758	86.1	20,340	4,395	362.8
Partnership	14,798	14,803	(0.0)	31,417	27,874	12.7
Intersegment eliminations	(80)	(95)	(15.8)	(155)	(793)	(80.5)
Corporate activities	(9,842)	(10,381)	(5.2)	(18,391)	(18,209)	1.0
	<u>\$ (3,786)</u>	<u>\$ 27,409</u>	<u>*</u>	<u>\$ 13,606</u>	<u>\$ 4,763</u>	<u>185.7%</u>

	Three Months Ended			Six Months Ended		
	June 30,		% Variance	June 30,		% Variance
	2017	2016		2017	2016	
EBITDA:						
Ethanol production	\$ (873)	\$ 22,744	*	\$ 12,951	\$ 9,008	43.8%
Agribusiness and energy services	3,747	11,881	(68.5%)	10,760	14,936	(28.0)
Food and ingredients	13,955	6,042	131.0	26,469	4,965	433.1
Partnership	16,066	16,312	(1.5)	33,960	30,621	10.9
Intersegment eliminations	(80)	(314)	(74.5)	(155)	(1,135)	(86.3)
Corporate activities	(8,742)	(9,009)	(3.0)	(16,063)	(16,505)	(2.7)
	<u>\$ 24,073</u>	<u>\$ 47,656</u>	<u>(49.5%)</u>	<u>\$ 67,922</u>	<u>\$ 41,890</u>	<u>62.1%</u>

* Percentage variance not considered meaningful.

We use EBITDA as a segment measure of profitability to compare the financial performance of our reportable segments and manage those segments. We believe EBITDA is a useful measure to compare our performance against other companies. EBITDA should not be considered an alternative to, or more meaningful than, net income, which is prepared in accordance with GAAP. EBITDA calculations may vary from company to company. Accordingly, our computation of EBITDA may not be comparable with a similarly titled measure of other companies.

The following table reconciles net income (loss) to EBITDA for the periods indicated (in thousands):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Net income (loss)	\$ (11,796)	\$ 12,985	\$ (10,145)	\$ (6,831)
Interest expense	19,430	10,499	37,926	21,297
Income tax expense (benefit)	(9,749)	5,471	(12,130)	(9,422)
Depreciation and amortization	26,188	18,701	52,271	36,846
EBITDA	<u>\$ 24,073</u>	<u>\$ 47,656</u>	<u>\$ 67,922</u>	<u>\$ 41,890</u>

Three Months Ended June 30, 2017, compared with the Three Months Ended June 30, 2016

Consolidated Results

Consolidated revenues decreased \$1.5 million for the three months ended June 30, 2017, compared with the same period in 2016. Revenues were impacted by decreased grain trading activity volumes and lower average realized prices for distillers grains. This was partially offset by an increase in ethanol volumes sold, plus the additions of Fleischmann's Vinegar during the fourth quarter of 2016 and the cattle feedlots during the first and second quarters of 2017.

Operating income decreased \$31.2 million for the three months ended June 30, 2017, compared with the same period last year primarily due to decreased margins on ethanol production. Interest expense increased \$8.9 million for the three months ended June 30, 2017, compared with the same period in 2016, primarily due to higher average debt outstanding and borrowing costs, as well as a \$1.3 million charge related to the extinguishment of a portion of the 3.25% convertible notes. Income tax benefit was \$9.7 million for the three months ended June 30, 2017, compared with income tax expense of \$5.5 million for the same period in 2016.

The following discussion provides greater detail about our second quarter segment performance.

Ethanol Production Segment

Key operating data for our ethanol production segment is as follows:

	Three Months Ended June 30,		% Variance
	2017	2016	
Ethanol produced (thousands of gallons)	275,539	274,271	0.5%
Distillers grains produced (thousands of equivalent dried tons)	728	734	(0.8)
Corn oil produced (thousands of pounds)	65,685	64,514	1.8
Corn consumed (thousands of bushels)	95,680	95,638	0.0

Revenues in our ethanol production segment increased \$23.7 million for the three months ended June 30, 2017, compared with the same period in 2016 primarily due to increased ethanol volumes sold and higher average realized ethanol prices, partially offset by lower average distillers grains prices realized. Ethanol production capacity increased due to the acquisition of the Madison, Mount Vernon and York ethanol plants, which produced approximately 34.0 mmg of ethanol during the three months ended June 30, 2017. This was offset by reducing our production capacity utilization in response to a weak ethanol margin environment during the quarter.

Cost of goods sold for our ethanol production segment increased \$47.2 million for the three months ended June 30, 2017, compared with the same period last year due to increased production costs including higher natural gas prices, as well as increased third-party ethanol volumes purchased and sold, partially offset by lower corn prices during the three months ended June 30, 2017. As a result of the factors identified above, EBITDA decreased \$23.6 million for the three months ended June 30, 2017, compared with the same period in 2016. Depreciation and amortization expense for the segment was \$20.1 million for the three months ended June 30, 2017, compared with \$15.2 million for the same period last year.

Agribusiness and Energy Services Segment

Revenues in our agribusiness and energy services segment decreased \$51.2 million while EBITDA decreased by \$8.1 million for the three months ended June 30, 2017, compared with the same period in 2016. The decrease in revenues was primarily due to a decrease in grain trading activity volumes and lower average realized prices for distillers grains. EBITDA decreased primarily as a result of decreased margins on trading activity.

Food and Ingredients Segment

Revenues in our food and ingredients segment increased \$29.2 million for the three months ended June 30, 2017, compared with the same period in 2016. The increase in revenues was primarily due to the acquisitions of Fleischmann's

Vinegar and the cattle feedlots, as well as higher average realized cattle prices, partially offset by a decrease in cattle volumes sold. The daily average company-owned cattle on feed for the three months ended June 30, 2017 and 2016, was approximately 89,000 and 66,000 head, respectively, and the daily average third-party owned cattle on feed for the three months ended June 30, 2017 and 2016, was approximately 100,000 and 1,600, respectively.

EBITDA increased by \$7.9 million for the three months ended June 30, 2017, compared with the same period in 2016 primarily due to the acquisition of Fleischmann's Vinegar.

Partnership Segment

Revenues generated by our partnership segment decreased \$0.4 million for the three months ended June 30, 2017 compared to the same period of 2016, due to a decrease in the average rate charged for the railcar volumetric capacity related to the rail transportation services agreement with Green Plains Trade, as well as a lower throughput volumes under the third-party terminal agreements. This was partially offset by higher storage and throughput volumes. EBITDA decreased by \$0.2 million during the three months ended June 30, 2017, compared with the same period in 2016 due to the decreased revenues, partially offset by decreased operations and maintenance expenses of \$0.2 million during the three months ended June 30, 2017, compared with the same period of 2016.

Intersegment Eliminations

Intersegment eliminations of revenues increased by \$2.7 million for the three months ended June 30, 2017, compared with the same period in 2016 due to the increased intersegment distillers grain revenues paid to the ethanol production and agribusiness and energy services segments and increased intersegment corn origination fees paid to the agribusiness and energy services segment.

Corporate Activities

EBITDA remained relatively unchanged for corporate activities during the three months ended June 30, 2017, compared with the same period in 2016, as there were no significant changes in corporate selling, general and administrative expenses.

Income Taxes

We recorded income tax benefit of \$9.7 million for the three months ended June 30, 2017, compared with income tax expense of \$5.5 million for the same period in 2016. The change in income taxes was due primarily to a loss before income taxes for the 2017 period.

Six Months Ended June 30, 2017, compared with the Six Months Ended June 30, 2016

Consolidated Results

Consolidated revenues increased \$137.0 million for the six months ended June 30, 2017, compared with the same period in 2016. Revenues were impacted by an increase in ethanol, corn oil, distillers grains and cattle volumes sold, as well as higher average realized ethanol prices. In addition, we acquired Fleischmann's Vinegar during the fourth quarter of 2016 and cattle feedlots during the first and second quarters of 2017. This was partially offset by a decrease in grain trading activity volumes and lower average realized prices for grain, distillers grains and cattle.

Operating income increased \$8.8 million for the six months ended June 30, 2017, compared with the same period last year primarily due to increased margins on cattle and the acquisitions of Fleischmann's Vinegar and the cattle feedlots. Interest expense increased \$16.6 million for the six months ended June 30, 2017, compared with the same period in 2016, primarily due to higher average debt outstanding and borrowing costs, as well as a \$1.3 million charge related to the extinguishment of a portion of the 3.25% convertible notes. Income tax benefit was \$12.1 million for the six months ended June 30, 2017, compared with \$9.4 million for the same period in 2016.

The following discussion provides greater detail about our segment performance for the first six months of 2017.

Ethanol Production Segment

Key operating data for our ethanol production segment is as follows:

	Six Months Ended June 30,		% Variance
	2017	2016	
Ethanol produced (thousands of gallons)	601,965	521,226	15.5%
Distillers grains produced (thousands of equivalent dried tons)	1,605	1,381	16.2
Corn oil produced (thousands of pounds)	141,042	124,354	13.4
Corn consumed (thousands of bushels)	209,165	182,169	14.8

Revenues in our ethanol production segment increased \$116.7 million for the six months ended June 30, 2017, compared with the same period in 2016 primarily due to higher volumes of ethanol, distillers grains and corn oil produced and higher average corn oil prices realized, partially offset by lower average distillers grains prices realized. The increased volumes produced was primarily due to the acquisition of the Madison, Mount Vernon and York ethanol plants, which produced approximately 87.2 mmg of ethanol during the six months ended June 30, 2017.

Cost of goods sold for our ethanol production segment increased \$111.8 million for the six months ended June 30, 2017, compared with the same period last year due to higher production volumes, partially offset by lower corn prices. As a result of the factors identified above, E B ITDA increased \$3.9 million for the six months ended June 30, 2017, compared with the same period in 2016. Depreciation and amortization expense for the segment was \$40.5 million for the six months ended June 30, 2017, compared with \$30.9 million for the same period last year.

Agribusiness and Energy Services Segment

Revenues in our agribusiness and energy services segment decreased \$41.0 million while EBITDA decreased by \$4.2 million for the six months ended June 30, 2017, compared with the same period in 2016. The decrease in revenues was primarily due to a decrease in grain trading activity volumes and lower average realized prices for distillers grains. This was partially offset by increased intersegment distillers grain revenues and corn origination fees. EBITDA decreased primarily as a result of decreased margins on trading activity, partially offset by increased intersegment corn origination fees.

Food and Ingredients Segment

Revenues in our food and ingredients segment increased \$68.5 million for the six months ended June 30, 2017, compared with the same period in 2016. The increase in revenues was primarily due to an increase in cattle volumes sold as well as the acquisitions of Fleischmann's Vinegar and the cattle feedlots, partially offset by lower average realized cattle prices. The daily average company-owned cattle on feed for the six months ended June 30, 2017 and 2016, was approximately 76,000 and 63,000 head, respectively, and the daily average third-party owned cattle on feed for the six months ended June 30, 2017 and 2016, was approximately 53,000 and 1,600, respectively.

EBITDA increased by \$21.5 million for the six months ended June 30, 2017, compared with the same period in 2016 primarily due to an increase in cattle margins, as well as the acquisition of Fleischmann's Vinegar.

Partnership Segment

Revenues generated by our partnership segment increased \$3.0 million for the six months ended June 30, 2017 compared to the same period of 2016, due to higher storage and throughput volumes, partially offset by a decrease in the average rate charged for the railcar volumetric capacity related to the rail transportation services agreement with Green Plains Trade, as well as a lower throughput volumes under the third-party terminal agreements. EBITDA increased \$3.3 million for the six months ended June 30, 2017, compared with the same period in 2016 due to the increased revenues, as well as a slight decrease in operations and maintenance expenses of \$0.4 million during the six months ended June 30, 2017 compared with the same period of 2016.

Intersegment Eliminations

Intersegment eliminations of revenues increased by \$10.3 million for the six months ended June 30, 2017, compared with the same period in 2016 due to the increase in storage and throughput fees paid to the partnership segment, increased intersegment distillers grain and corn oil revenues paid to the ethanol production and agribusiness and energy services segments and increased intersegment corn origination fees paid to the agribusiness and energy services segment.

Corporate Activities

EBITDA remained relatively unchanged for corporate activities during the six months ended June 30, 2017, compared with the same period in 2016, as there were no significant changes in corporate selling, general and administrative expenses.

Income Taxes

We recorded income tax benefit of \$12.1 million for the six months ended June 30, 2017, compared with \$9.4 million for the same period in 2016. The increase in income tax benefit was due primarily to a higher loss before income taxes for the 2017 period.

Liquidity and Capital Resources

Our principal sources of liquidity include cash generated from operating activities and bank credit facilities. We fund our operating expenses and service debt primarily with operating cash flows. Capital resources for maintenance and growth expenditures are funded by a variety of sources, including cash generated from operating activities, borrowings under bank credit facilities, or issuance of senior notes or equity. Our ability to access capital markets for debt under reasonable terms depends on our financial condition, credit ratings and market conditions. We believe that our ability to obtain financing at reasonable rates and history of consistent cash flow from operating activities provide a solid foundation to meet our future liquidity and capital resource requirements.

On June 30, 2017, we had \$195.4 million in cash and equivalents, excluding restricted cash, consisting of \$111.2 million held at our parent company and the remainder held at our subsidiaries. We also had \$171.1 million available under our revolving credit agreements, some of which were subject to restrictions or other lending conditions. Subsequent to June 30, 2017, we increased the availability under two of our revolving credit facilities by a total of \$250.0 million. Funds held by our subsidiaries are generally required for their ongoing operational needs and restricted from distribution. At June 30, 2017, our subsidiaries had approximately \$790.5 million of net assets that were not available to us in the form of dividends, loans or advances due to restrictions contained in their credit facilities.

Net cash used by operating activities was \$12.6 million for the six months ended June 30, 2017, compared with net cash provided by operating activities of \$4.9 million for the same period in 2016. Operating activities compared to the prior year were primarily affected by decreased operating profits and an increase in working capital for the six months ended June 30, 2017, primarily consisting of an increase in inventories and a decrease in accounts payable and accrued liabilities, partially offset by a decrease in accounts receivable. Net cash used by investing activities was \$98.6 million for the six months ended June 30, 2017, due primarily to acquisitions of the cattle feedlots, as well as capital expenditures at our existing ethanol plants and our vinegar operations. Net cash provided by financing activities was \$2.4 million for the six months ended June 30, 2017. Green Plains Trade, Green Plains Cattle and Green Plains Grain use revolving credit facilities to finance working capital requirements. We frequently draw from and repay these facilities which results in significant cash movements reflected on a gross basis within financing activities as proceeds from and payments on short-term borrowings.

We incurred capital expenditures of \$28.2 million in the first six months of 2017 for various maintenance and expansion projects. Capital spending for the remainder of 2017 is expected to be approximately \$23.2 million for various projects, and is expected to be financed with available borrowings under our credit facilities and cash provided by operating activities.

On July 25, 2017, we hosted a lender meeting to discuss the possible refinancing of credit facilities at two of our wholly owned subsidiaries, Green Plains Processing and Fleischman's Vinegar, by issuing a new \$500 million senior secured Term Loan B credit facility.

Our business is highly sensitive to the price of commodities, particularly for corn, ethanol, distillers grains, corn oil, natural gas and cattle. We use derivative financial instruments to reduce the market risk associated with fluctuations in commodity prices. Sudden changes in commodity prices may require cash deposits with brokers for margin calls or significant liquidity with little advanced notice to meet margin calls, depending on our open derivative positions. On June 30,

2017, we had \$29.7 million in deposits for broker margin requirements. We continuously monitor our exposure to margin calls and believe we will continue to maintain adequate liquidity to cover margin calls from our operating results and borrowings.

We have paid a quarterly cash dividend since August 2013 and anticipate declaring a cash dividend in future quarters on a regular basis. Future declarations of dividends, however, are subject to board approval and may be adjusted as our liquidity, business needs or market conditions change. On May 9, 2017, our board of directors declared a quarterly cash dividend of \$0.12 per share. The dividend was paid on June 16, 2017, to shareholders of record at the close of business on May 26, 2017.

For each calendar quarter commencing with the quarter ended September 30, 2015, the partnership agreement requires the partnership to distribute all available cash, as defined, to its partners, including us, within 45 days after the end of each calendar quarter. Available cash generally means all cash and cash equivalents on hand at the end of that quarter less cash reserves established by our general partner plus all or any portion of the cash on hand resulting from working capital borrowings made subsequent to the end of that quarter. On July 20, 2017, the board of directors of the general partner of the partnership declared a cash distribution of \$0.45 per unit on outstanding common and subordinated units. The distribution is payable on August 11, 2017, to unitholders of record at the close of business on August 4, 2017.

In August 2014, we announced a share repurchase program of up to \$100 million of our common stock. Under the program, we may repurchase shares in open market transactions, privately negotiated transactions, accelerated share buyback programs, tender offers or by other means. The timing and amount of repurchase transactions are determined by our management based on market conditions, share price, legal requirements and other factors. The program may be suspended, modified or discontinued at any time without prior notice. There were no shares repurchased under the program during the second quarter of 2017. To date, we have repurchased 514,990 shares of common stock for approximately \$10.0 million under the program.

We believe we have sufficient working capital for our existing operations. A sustained period of unprofitable operations, however, may strain our liquidity making it difficult to maintain compliance with our financing arrangements. We may sell additional equity or borrow capital to improve or preserve our liquidity, expand our business or build additional or acquire existing businesses. We cannot provide assurance that we will be able to secure funding necessary for additional working capital or these projects at reasonable terms, if at all.

Debt

For additional information related to our debt, see *Note 8 – Debt* included as part of the notes to consolidated financial statements and *Note 11 – Debt* included as part of the notes to consolidated financial statements included in our annual report on Form 10-K for the year ended December 31, 2016.

We were in compliance with our debt covenants at June 30, 2017. Based on our forecasts and the current margin environment, we believe we will maintain compliance at each of our subsidiaries for the next twelve months or have sufficient liquidity available on a consolidated basis to resolve noncompliance. We cannot provide assurance that actual results will approximate our forecasts or that we will inject the necessary capital into a subsidiary to maintain compliance with its respective covenants. In the event a subsidiary is unable to comply with its debt covenants, the subsidiary's lenders may determine that an event of default has occurred, and following notice, the lenders may terminate the commitment and declare the unpaid balance due and payable.

Ethanol Production Segment

Green Plains Processing has a \$345.0 million senior secured credit facility which matures in June of 2020. At June 30, 2017, the outstanding principal balance was \$270.6 million and our interest rate was 6.72%.

We also have small equipment financing loans, capital leases on equipment or facilities, and other forms of debt financing.

Agribusiness and Energy Services Segment

Green Plains Grain has a \$125.0 million senior secured asset-based revolving credit facility to finance working capital up to the maximum commitment based on eligible collateral. The facility matures in July of 2019. This facility can be increased by up to \$75.0 million with agent approval and up to \$50.0 million for seasonal borrowings. Total commitments outstanding

under the facility cannot exceed \$ 250.0 million. At June 30, 2017, the outstanding principal balance was \$112.0 million on the facility and our interest rate was 5.45%.

Green Plains Trade has a \$150.0 million senior secured asset-based revolving credit facility to finance working capital up to the maximum commitment based on eligible collateral. This facility can be increased by up to \$75.0 million with agent approval. The facility matures in November of 2019. At June 30, 2017, the outstanding principal balance was \$84.5 million on the facility and our interest rate was 3.72%.

On July 28, 2017, we amended the credit facility, to increase the maximum commitment from \$150.0 million to \$300.0 million and extend the maturity date to July 28, 2022. The amended credit facility increases advance rates and modifies the eligible inventory definitions to include additional commodities and locations. Advances are subject to variable interest rates equal to a daily LIBOR rate plus 2.25% or the base rate plus 1.25%. The unused portion of the credit facility is also subject to a commitment fee of 0.375% per annum.

Food and Ingredients Segment

Green Plains Cattle has a senior secured asset-based revolving credit facility to finance working capital up to the maximum commitment based on eligible collateral. On April 28, 2017, we amended the credit facility to fund the additional working capital requirements related to the acquisition of two cattle feedlots located in Leoti, Kansas and Yuma, Colorado. The amendment increased the maximum commitment from \$100.0 million to \$200.0 million until July 31, 2017, when it increased to \$300.0 million. The maturity date was extended from October 31, 2017 to April 30, 2020.

Advances under the revolving credit facility, as amended, are subject to variable interest rates equal to LIBOR plus 2.0% to 3.0% or the base rate plus 1.0% to 2.0%, depending on the preceding three months' excess borrowing availability. The amended credit facility also includes an accordion feature that enables the credit facility to be increased by up to \$100.0 million with agent approval. The unused portion of the credit facility is also subject to a commitment fee of 0.20% to 0.30% per annum, depending on the preceding three months' excess borrowing availability. Interest is payable as required, but not less than quarterly in arrears and principal is due upon maturity.

The amended terms impose affirmative and negative covenants, including maintaining working capital of 15% of the commitment amount, tangible net worth of 20% of the commitment amount and a total debt to tangible net worth ratio of 3.50x. Capital expenditures are limited to \$10.0 million per year under the credit facility, plus \$10.0 million per year if funded by a contribution from the parent, plus unused amounts from the previous year.

At June 30, 2017, the outstanding principal balance was \$145.0 million on the facility and our interest rate was 3.66%.

Fleischmann's Vinegar has a \$130.0 million senior secured term loan and a \$15.0 million senior secured revolving credit facility. The facilities mature in October of 2022. At June 30, 2017, the outstanding principal balances were \$129.0 million and \$4.5 million on the term loan and revolving loan, respectively, and our interest rate on each of the loans was 8.23%.

Partnership Segment

Green Plains Partners, through a wholly owned subsidiary, has a \$155.0 million secured revolving credit facility to fund working capital, acquisitions, distributions, capital expenditures and other general partnership purposes. The facility can be increased by up to \$100.0 million without the consent of the lenders. The facility matures in July of 2020. At June 30, 2017, the outstanding principal balance was \$127.9 million on the facility and our interest rate was 3.78%.

Corporate Activities

In August 2016, we issued \$170.0 million of 4.125% convertible senior notes due in 2022, or 4.125% notes, which are senior, unsecured obligations with interest payable on March 1 and September 1 of each year. Prior to March 1, 2022, the 4.125% notes are not convertible unless certain conditions are satisfied. The initial conversion rate is 35.7143 shares of common stock per \$1,000 of principal which is equal to a conversion price of approximately \$28.00 per share. The conversion rate is subject to adjustment upon the occurrence of certain events, including when the quarterly cash dividend exceeds \$0.12 per share. We may settle the 4.125% notes in cash, common stock or a combination of cash and common stock.

In September 2013, we issued \$120.0 million of 3.25% convertible senior notes due in 2018, or 3.25% notes, which are senior, unsecured obligations with interest payable on April 1 and October 1 of each year. Prior to April 1, 2018, the 3.25%

notes are not convertible unless certain conditions are satisfied. The conversion rate is subject to adjustment upon the occurrence of certain events, including when the quarterly cash dividend exceeds \$0.04 per share. The conversion rate was recently adjusted as of June 30, 2017 to 49.7602 shares of common stock per \$1,000 of principal, which is equal to a conversion price of approximately \$20.10 per share. We may settle the 3.25% notes in cash, common stock or a combination of cash and common stock.

During the second quarter of 2017, we entered into several privately negotiated agreements with holders, on behalf of certain beneficial owners of our 3.25% notes. Under these agreements, 2,783,725 shares of our common stock and approximately \$8.5 million in cash plus accrued but unpaid interest on the 3.25% notes, were exchanged for approximately \$56.3 million in aggregate principal amount of the 3.25% notes. Common stock held as treasury shares were exchanged for the 3.25% notes. Following the closings of the agreements, \$63.7 million aggregate principal amount of the 3.25% notes remain outstanding.

At issuance, we separately accounted for the liability and equity components of the convertible notes by bifurcating the gross proceeds between the indebtedness, or liability component, and the embedded conversion option, or equity component. This bifurcation was done by estimating an effective interest rate on the date of issuance for similar notes. The embedded conversion option was recorded in stockholders' equity. Since we did not exercise the embedded conversion option associated with the notes, pursuant to the guidance within ASC Topic 470, *Debt*, we recorded a loss upon extinguishment measured by the difference between the fair value and carrying value of the liability portion of the notes. As a result, we recorded a charge to interest expense in the consolidated financial statements of approximately \$1.3 million during the three months ended June 30, 2017. This charge also included \$0.6 million of unamortized debt issuance costs related to the principal balance extinguished. The remaining settlement consideration transferred was allocated to the reacquisition of the embedded conversion option and recognized as a reduction of additional paid-in capital.

Contractual Obligations

Contractual obligations as of June 30, 2017, were as follows (in thousands):

Contractual Obligations	Payments Due By Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Long-term and short-term debt obligations (1)	\$ 1,135,550	\$ 347,641	\$ 203,650	\$ 264,818	\$ 319,441
Interest and fees on debt obligations (2)	199,691	59,407	85,092	38,005	17,187
Operating lease obligations (3)	108,675	34,665	39,279	15,118	19,613
Other	9,090	2,883	1,242	2,291	2,674
Purchase obligations:					
Forward grain purchase contracts (4)	243,840	232,260	8,163	2,000	1,417
Other commodity purchase contracts (5)	226,763	206,440	20,323	-	-
Other	23,151	9,602	13,549	-	-
Total contractual obligations	\$ 1,946,760	\$ 892,898	\$ 371,298	\$ 322,232	\$ 360,332

- (1) Includes the current portion of long-term debt and excludes the effect of any debt discounts and issuance costs.
- (2) Interest amounts are calculated over the terms of the loans using current interest rates, assuming scheduled principal and interest amounts are paid pursuant to the debt agreements. Includes administrative and/or commitment fees on debt obligations.
- (3) Operating lease costs are primarily for railcars and office space.
- (4) Purchase contracts represent index-priced and fixed-price contracts. Index purchase contracts are valued at current quarter-end prices.
- (5) Includes fixed-price ethanol, dried distillers grains and natural gas purchase contracts.

Critical Accounting Policies and Estimates

Key accounting policies, including those relating to revenue recognition, depreciation of property and equipment, asset retirement obligations, impairment of long-lived assets and goodwill, derivative financial instruments, and accounting for income taxes, are impacted significantly by judgments, assumptions and estimates used in the preparation of the consolidated financial statements. Information about our critical accounting policies and estimates are included in our annual report on Form 10-K for the year ended December 31, 2016.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements other than the operating leases, which are entered into during the ordinary course of business and disclosed in the *Contractual Obligations* section above .

Item 3. Qualitative and Quantitative Disclosures about Market Risk.

We use various financial instruments to manage and reduce our exposure to various market risks, including changes in commodity prices and interest rates. We conduct all of our business in U.S. dollars and are not currently exposed to foreign currency risk.

Interest Rate Risk

We are exposed to interest rate risk through our loans which bear interest at variable rates. Interest rates on our variable-rate debt are based on the market rate for the lender's prime rate or LIBOR. A 10% increase in interest rates would affect our interest cost by approximately \$4.9 million per year. At June 30, 2017, we had \$1.1 billion in debt, \$863.6 million of which had variable interest rates.

For additional information related to our debt, see *Note 8 – Debt* included as part of the notes to consolidated financial statements and *Note 11 – Debt* included as part of the notes to consolidated financial statements included in our annual report on Form 10-K for the year ended December 31, 2016.

Commodity Price Risk

Our business is highly sensitive to commodity price risk, particularly for ethanol, distillers grains, corn oil, corn, natural gas and cattle. Corn prices are affected by weather conditions, yield, changes in domestic and global supply and demand, and government programs and policies. Natural gas prices are influenced by severe weather in the summer and winter and hurricanes in the spring, summer and fall. Other factors include North American energy exploration and production, and the amount of natural gas in underground storage during injection and withdrawal seasons. Ethanol prices are sensitive to world crude oil supply and demand, the price of crude oil, gasoline and corn, the price of substitute fuels, refining capacity and utilization, government regulation and consumer demand for alternative fuels. Distillers grains prices are impacted by livestock numbers on feed, prices for feed alternatives and supply, which is associated with ethanol plant production. Cattle prices are impacted by weather conditions, overall economic conditions and government regulations.

To reduce the risk associated with fluctuations in the price of corn, natural gas, ethanol, distillers grains, corn oil and cattle, at times we use forward fixed-price physical contracts and derivative financial instruments, such as futures and options executed on the Chicago Board of Trade and the New York Mercantile Exchange. We focus on locking in favorable operating margins, when available, using a model that continually monitors market prices for corn, natural gas and other inputs relative to the price for ethanol and distillers grains at each of our production facilities. We create offsetting positions using a combination of forward fixed-price purchases, sales contracts and derivative financial instruments. As a result, we frequently have gains on derivative financial instruments that are offset by losses on forward fixed-price physical contracts or inventories and vice versa. Our results are impacted by a mismatch of gains or losses associated with the derivative instrument during a reporting period when the physical commodity purchases or sale has not yet occurred. During the three and six months ended June 30, 2017, revenues included net losses of \$3.0 million and \$5.1 million, respectively, and cost of goods sold included net gains of \$5.0 million and \$20.8 million, respectively, associated with derivative financial instruments.

Ethanol Production Segment

In the ethanol production segment, net gains and losses from settled derivative instruments are offset by physical commodity purchases or sales to achieve the intended operating margins. To reduce commodity price risk caused by market fluctuations, we enter into exchange-traded futures and options contracts that serve as economic hedges.

Our exposure to market risk, which includes the impact of our risk management activities resulting from our fixed-price purchase and sale contracts and derivatives, is based on the estimated net income effect resulting from a hypothetical 10% change in price for the next 12 months starting on June 30, 2017, are as follows (in thousands):

Commodity	Estimated Total Volume Requirements for the Next 12 Months (1)	Unit of Measure	Net Income Effect of Approximate 10% Change in Price
Ethanol	1,470,000	Gallons	\$ 147,757
Corn	524,000	Bushels	\$ 135,028
Distillers grains	4,100	Tons (2)	\$ 24,259
Corn Oil	340,000	Pounds	\$ 5,580
Natural gas	41,700	MmBTU	\$ 6,094

(1) Estimated volumes reflect anticipated expansion of production capacity at our ethanol plants and assumes production at full capacity.

(2) Distillers grains quantities are stated on an equivalent dried ton basis.

Agribusiness and Energy Services Segment

In the agribusiness and energy services segment, our inventories, physical purchase and sale contracts and derivatives are marked to market. To reduce commodity price risk caused by market fluctuations for purchase and sale commitments of grain and grain held in inventory, we enter into exchange-traded futures and options contracts that serve as economic hedges.

The market value of exchange-traded futures and options used for hedging are highly correlated with the underlying market value of grain inventories and related purchase and sale contracts for grain. The less correlated portion of inventory and purchase and sale contract market values, known as basis, is much less volatile than the overall market value of exchange-traded futures and tends to follow historical patterns. We manage this less volatile risk by constantly monitoring our position relative to the price changes in the market. Inventory values are affected by the month-to-month spread in the futures markets. These spreads are also less volatile than overall market value of our inventory and tend to follow historical patterns, but cannot be mitigated directly. Our accounting policy for futures and options, as well as the underlying inventory held for sale and purchase and sale contracts, is to reflect their current market values and include gains and losses in the consolidated statement of operations.

Our daily net commodity position consists of inventories related to purchase and sale contracts and exchange-traded contracts. The fair value of our position was approximately \$21.9 million for grain at June 30, 2017. Our market risk at that date, based on the estimated net income effect resulting from a hypothetical 10% change in price, was approximately \$1.4 million.

Food and Ingredients Segment

In the food and ingredients segment, our physical purchase and sale contracts and derivatives are marked to market. To reduce commodity price risk caused by market fluctuations for purchase and sale commitments of cattle, we enter into exchange-traded futures and options contracts that serve as economic hedges.

The market value of exchange-traded futures and options used for hedging are highly correlated with the underlying market value of purchase and sale contracts for cattle. The less correlated portion of inventory and purchase and sale contract market values, known as basis, is much less volatile than the overall market value of exchange-traded futures and tends to follow historical patterns. We manage this less volatile risk by constantly monitoring our position relative to the price changes in the market. Inventory values are affected by the month-to-month spread in the futures markets. These spreads are also less volatile than overall market value of our inventory and tend to follow historical patterns, but cannot be mitigated directly. Our accounting policy for futures and options, as well as the underlying inventory held for sale and purchase and sale contracts, is to reflect their current market values and include gains and losses in the consolidated statement of operations.

Our daily net commodity position consists of inventories related to purchase and sale contracts and exchange-traded contracts. The fair value of our position was approximately \$3.8 million for cattle at June 30, 2017. Our market risk at that date, based on the estimated net income effect resulting from a hypothetical 10% change in price, was approximately \$0.2 million.

Item 4. Controls and Procedures.*Evaluation of Disclosure Controls and Procedures*

We maintain disclosure controls and procedures designed to ensure information that must be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, as appropriate, to allow timely decisions regarding required financial disclosure.

Under the supervision of and participation of our chief executive officer and chief financial officer, management carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of June 30, 2017, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act and concluded that our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

Management is responsible for establishing and maintaining effective internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our consolidated financial statements for external purposes in accordance with U.S. generally accepted accounting principles. There were no material changes in our internal control over financial reporting that occurred during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting .

PART II – OTHER INFORMATION

Item 1 . Legal Proceedings.

We are currently involved in litigation that has arisen during the ordinary course of business. We do not believe this litigation will have a material adverse effect on our financial position, results of operations or cash flows.

Item 1A . Risk Factors.

Investors should carefully consider the discussion of risks and the other information in our annual report on Form 10-K for the year ended December 31, 2016 , i n Part I, Item 1A, “Risk Factors,” and the discussion of risks and other information in Part I, Item 2, “Management’s Discussion and Analysis of Financial Cond ition and Results of Operations, ” under “Cautionary Information Regarding Forward-Looking Statements,” of this report . Investors should also carefully consider the discussion of risks with the partnership under the heading “Risk Factors” and other information in their annual report on Form 10-K for the year ended December 31, 2016. Although we have attempted to discuss key factors, our investors need to be aware that other risks may prove to be important in the future. New risks may emerge at any time and we cannot predict such risks or estimate the extent to which they may affect our financial performance. The following risk factor supplements and/or updates risk factors previously disclosed and should be considered in conjunction with the other information included in, or incorporated by reference in, this quarterly report on Form 10-Q.

Government mandates affecting ethanol usage could change and impact the ethanol market.

Our operations could be adversely impacted by legislation or EPA actions, as set forth below or otherwise, that may reduce the RFS II mandate. Similarly, should federal mandates regarding oxygenated gasoline be repealed, the market for domestic ethanol could be adversely impacted. Economic incentives to blend based on the relative value of gasoline versus ethanol, taking into consideration the octane value of ethanol, environmental requirements and the RFS II mandate, may affect future demand. A significant increase in supply beyond the RFS II mandate could have an adverse impact on ethanol prices. Moreover, changes to RFS II could negatively impact the price of ethanol or cause imported sugarcane ethanol to become more economical than domestic ethanol.

Flexible-fuel vehicles, which are designed to run on a mixture of fuels such as E85, are eligible for vehicle manufacturer incentives in the form o f CAFE credits. Flexible-fuel vehicle credits have been decreasing since 2014 and will be completely phased out by 2020, which may impact manufacturers’ willingness to continue building flexible-fuel vehicles and ultimately result in slower E85 growth and lower ethanol prices.

Under the provisions of the EISA, Congress established a mandate setting the minimum volume of renewable fuels that must be blended with gasoline under the RFS II, which affects the domestic market for ethanol. The EPA has the authority to waive the requirements, in whole or in part, if there is inadequate domestic renewable fuel supply or the requirement severely harms the economy or the environment. After 2022, volumes shall be determined by the EPA in coordination with the Secretaries of Energy and Agriculture, taking into account such factors as impact on environment, energy security, future rates of production, cost to consumers, infrastructure, and other factors such as impact on commodity prices, job creation, rural economic development, or impact on food prices.

On June 14, 2017, the Senate Environment and Public Works Committee held a hearing about the Consumer and Fuel Retailer Choice Act (S. 517). The bill was introduced to the Senate and House of Representatives (H.R. 1311) on March 2, 2017, proposing to lift restrictions on the sale of gasoline blended with 15% ethanol between June 1 and September 15 by extending the RVP waiver to E15. The RVP waiver would allow the sale of E15 in a m anner consistent with E10 year- round, potentially reducing consumer confusion.

On July 5, 2017, the EPA proposed maintaining the RVOs for conventional ethanol at 15.0 billion gallons, in line with our expectations, while lowering the volume obligations for advanced alternatives, reducing the overall biofuel target to 19.24 billion gallons in 2018. According to RFS II, if mandatory renewable fuel volumes are reduced by at least 20% for two consecutive years, the EPA is required to modify, or reset, statutory volumes through 2022. With the 2018 being the first year the total proposed RVOs are more than 20% below statutory levels, the Administrator has directed the EPA staff to initiate the required technical analysis to inform a reset rule. If 2019 RVOs are also more than 20% below statutory levels, an RVO reset will be triggered under RFS II. This will require the EPA to modify statutory volumes through 2022 within one year of the trigger event, with the standard for review based on the same factors to be utilized when the EPA sets RVOs post-2022.

The U . S . Federal District Court for the D . C . Circuit ruled on July 28, 2107 in favor of the Americans for Clean Energy

and its aligned petitioners against the EPA. The decision concluded the EPA erred in how it interpreted the “inadequate domestic supply” waiver provision of RFS II which authorizes the EPA to consider supply - side factors affecting the volume of renewable fuel that is available to refiners, blenders, and importers to meet the statutory volume requirements, but as the Court concluded it does not allow the EPA to consider the volume of renewable fuel that is available to ultimate consumers or the demand-side constraints that affect the consumption of renewable fuel by consumers. As a result, the Court vacated the EPA’s decision to reduce the total renewable fuel volume requirements for 2016 through use of its “inadequate domestic supply” waiver authority, and remanded to the EPA to address the 2016 total renewable fuels volume requirements. While we anticipate no direct impact from the decision, we expect the primary impact will be on the RINs market. However we believe it should benefit our industry overall with the EPA's waiver analysis now limited to the supply-side of the equation only.

While we currently believe the new presidential administration will support the environmental laws that are currently in place, to the extent federal or state laws or regulations are modified, the demand for ethanol may be reduced, which could negatively and materially affect our ability to operate profitably.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

Employees surrender shares when restricted stock grants are vested to satisfy statutory minimum required payroll tax withholding obligations. There were no shares that were surrendered during the second quarter of 2017 .

In August 2014, we announced a share repurchase program of up to \$100 million of our common stock. Under this program, we may repurchase shares in open market transactions, privately negotiated transactions, accelerated buyback programs, tender offers or by other means. The timing and amount of the transactions are determined by management based on its evaluation of market conditions, share price, legal requirements and other factors. The program may be suspended, modified or discontinued at any time, without prior notice. There were no shares repurchased under the program during the second quarter of 2017. Approximately \$90.0 million of shares are remaining to be repurchased under the program.

Item 3 . Defaults upon Senior Securities.

None.

Item 4 . Mine Safety Disclosures.

Not applicable.

Item 5 . Other Information.

None.

Item 6. Exhibits .**Exhibit Index**

Exhibit No.	Description of Exhibit
2.1	Asset Purchase Agreement, dated as of April 25, 2017, by and among Green Plains Cattle Company LLC, and Cargill Cattle Feeders, LLC. (Incorporated by reference to Exhibit 2.1 to the company's Current Report on Form 8-K dated April 26, 2017)
10.1	Second Amendment to the Credit Agreement, dated April 28, 2017, among Green Plains Cattle Company LLC, Bank of the West and ING Capital LLC, as Joint Administrative Agents, and the lenders party to the Credit Agreement (Incorporated by reference to Exhibit 10.1 to the company's Current Report on Form 8-K dated May 1, 2017)
10.2	Third Amendment to the Credit Agreement, dated June 29, 2017, among Green Plains Cattle Company LLC, Bank of the West and ING Capital LLC, as Joint Administrative Agents, and the lenders party to the Credit Agreement
10.3	Fourth Amended and Restated Revolving Credit and Security Agreement dated July 28, 2017, among Green Plains Trade Group LLC, the Lenders and PNC Bank, National Association as Lender and Agent (Incorporated by reference to Exhibit 10.1 to the company's Current Report on Form 8-K dated July 31, 2017)
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following information from Green Plains Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2017, formatted in Extensible Business Reporting Language (XBRL): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Cash Flows, and (v) the Notes to Consolidated Financial Statements

SIGN ATU RES

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 hereunto duly authorized.

GREEN PLAINS INC.

(Registrant)

Date: August 3 , 2017

By: */s/ Todd A. Becker* _____

Todd A. Becker
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 3 , 2017

By: */s/ Jerry L. Peters* _____

Jerry L. Peters
Chief Financial Officer
(Principal Financial Officer)

THIRD AMENDMENT TO THE CREDIT AGREEMENT

This Third Amendment to the Credit Agreement (" **Amendment** ") is dated as of June 29 , 2017 , between by and among GREEN PLAINS CATTLE COMPANY LLC (the " **Borrower** "), the commercial, banking or financial institutions whose signatures appear on the signature pages hereof or which hereafter become parties to the Credit Agreement (as defined below) (and such commercial, banking or financial institutions are sometimes referred to hereinafter collectively as the " **Lenders** " and individually as a " **Lender** "), and BANK OF THE WEST and ING CAPITAL, LLC, as " **Joint Administrative Agents** "). Borrower, Lenders, and the Joint Administrative Agents agree as follows:

PRELIMINARY STATEMENT. Borrower , Lenders, and the Joint Administrative Agents entered into that certain Credit Agreement dated as of December 3, 2014 (that credit agreement as amended herein and by any and all other modifications or amendments thereto is hereinafter referred to as the " **Credit Agreement** "; the terms defined in the Credit Agreement are used herein as therein defined) . Borrower , Lenders, and the Joint Administrative Agents wish to amend certain provisions of the Credit Agreement.

NOW, THEREFORE, the parties hereto agree as follows:

Section 1.01 Amendment to Schedule 1.01(b) of the Credit Agreement . Schedule 1.01(b) of the Credit Agreement is hereby amended and restated as attached to this Amendment.

Section 1.02 Amendment to Section 1.01 of the Credit Agreement . Section 1.01 of the Credit Agreement is hereby amended by adding or amending and restating the definitions of " **Current Assets** ", " **Current Liabilities** ", " **OCI** ", " **Hedging Agreement** ", " **Tangible Net Worth** " and " **Value** " as follows:

" **Current Assets** " shall mean the current assets of the Borrower as determined in accordance with generally accepted accounting principles less all amounts due from Affiliates, officers or employees (except for amounts owed by Affiliates in the ordinary course of business) plus the OCI .

" **Current Liabilities** " shall mean the current liabilities of the Borrower as determined in accordance with generally accepted accounting principles, including any negative cash balance on the Borrower's financial statement and Indebtedness for borrowed money under lines of credit with the Lenders used by the Borrower for working capital purposes.

"**Hedging Agreement**" shall mean any agreement to enable the Borrower to fix or limit or enable the Borrower to limit the market risk of holding Eligible Cattle in the cash or futures market.

" **OCI** " means the accumulated amount of other comprehensive income reflected as a loss , as set forth in the most recent Compliance Certificate, related to any Hedging Agreement with respect to Eligible Cattle , as such OCI may be adjusted by the Joint Administrative Agents from time to time .

" **Tangible Net Worth** " means the excess of the total assets of the Borrower over the total liabilities of the Borrower plus OCI , total assets and total liabilities each to be determined in accordance with GAAP consistent with those applied in the preparation of Borrower's opening balance sheet referred to in Section 5.05 excluding, however, from the determination of total assets: (i) goodwill, organizational expenses, research and development expenses, trademarks, trade names, copyrights, patents, patent applications, licenses and rights in any thereof, and other similar intangibles; (ii) treasury stock; (iii) securities that are not readily marketable; (iv) cash held in a sinking or other analogous fund established for the purpose of redemption, retirement, or prepayment of capital stock; (v) any write up in the book value of any asset resulting from a revaluation thereof subsequent to the date first above written; and (vi) any items not included in clauses (i) through (v) above that are treated as intangibles in conformity with GAAP.

" **Value** " shall mean with respect to (i) Eligible Inventory consisting of feed, the bid for such Eligible Inventory from a prospective purchaser of such Eligible Inventory within the general location of Borrower, and Eligible Inventory consisting of veterinary supplies, at cost; (ii) Eligible Cattle, Eligible Protected Cattle, Eligible Hedged Cattle, and Customer Cattle, at the Joint Administrative Agent's sole discretion, either (x) the current weight of such cattle multiplied by the current market price, as quoted by Cattle Fax or another independent and reliable source acceptable to the Joint Administrative Agent , (y) at Cost-to-Finish, or (z) otherwise such value as determined by the Joint Administrative Agent; and (iii) Eligible Outside Cattle, at the Joint Administrative Agent's sole discretion, either (x) the current weight of such cattle multiplied by the current market price, as quoted by Cattle Fax or another independent and reliable source acceptable to the Joint Administrative Agent, or (y) at cost.

Section 1.03 Amendment to Section 7.11 of the Credit Agreement . Section 7.11 of the Credit Agreement is hereby amended and restated as follows:

7.11 Financial Covenants .

- (a) Tangible Net Worth. Permit Tangible Net Worth plus Subordinated Debt as of the end of each fiscal quarter to be less than the sum of (i) twenty percent (20%) of the Revolving Commitment, and (ii) an amount equal to 50% of the net income after tax earned each fiscal year commencing with the fiscal year ending after December 31, 2017 (with no deduction for any net loss in any such fiscal year).
- (b) Working Capital. Permit Working Capital as of the end of each fiscal quarter to be less than fifteen percent (15 %) of the Revolving Commitment for the period of May 16, 2017 through July 30, 2017, commencing with fiscal quarter ending on or nearest to June 30, 2017 and for the period commencing July 31, 2017, commencing with the fiscal quarter ending on or nearest to September 30, 2017.
- (c) Total Debt to Tangible Net Worth . Permit Total Debt to Tangible Net Worth, plus Subordinated Debt, as of the end of each fiscal quarter to be greater than 3.50 to 1.

Section 1.04 Representations and Warranties of Borrower .

(a) Borrower is duly organized, validly existing and in good standing under the laws of the State of its formation.

(b) The execution, delivery and performance by Borrower of this Amendment, the Notes and the Credit Agreement, as amended hereby, are within Borrower's powers, have been duly authorized by all necessary action, if necessary, and do not contravene Borrower's operating agreement, or any law or any contractual restriction binding on or affecting Borrower , as applicable, or result in, or require, the creation of any lien, security interest or other charge or encumbrance upon or with respect to any of the properties.

(c) No authorization, approval or other action by, and no notice to or filing with, any governmental authority or regulatory body is required for the due execution, delivery and performance by Borrower of this Amendment, the Notes and the Credit Agreement, as amended hereby.

(d) This Amendment and the Credit Agreement, as amended hereby, constitute, legal, valid and binding obligations of Borrower enforceable against Borrower in accordance with their respective terms.

(e) No event listed in Section 8.01 of the Credit Agreement has occurred and is continuing.

Section 1.05 Effectiveness. This Amendment shall become effective when the Joint Administrative Agents have received (a) counterparts of this Amendment duly executed by the Borrower; and (b) such other documents, actions or assurances as Lenders or the Joint Administrative Agents may reasonably request.

Section 1.06 Reference to and Effect on the Credit Agreement . Upon the effectiveness of **Section 1.03** hereof:

(a) On and after the date hereof, each reference in the Credit Agreement to "this Agreement", "hereunder" "hereof", "herein" or words of like import shall mean and be a reference to the Credit Agreement as amended hereby.

(b) Except as specifically amended by any prior amendments, the Credit Agreement shall remain in full force and effect and is hereby ratified and confirmed.

(c) The execution, delivery and effectiveness of this Amendment shall not, except as expressly provided herein, operate as a waiver of any right, power or remedy of Lender under the Credit Agreement, nor constitute a waiver of any provision of the Credit Agreement.

Section 1.07 Execution in Counterparts . This Amendment may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed to be an original and all of which taken together shall constitute but one and the same instrument.

Section 1.08 Governing Law . This Amendment shall be governed by, and construed in accordance with, the laws (without giving effect to the conflicts of laws principles thereof) of the State of Nebraska.

Section 1.09 Expenses . The Borrower shall pay on demand all costs and expenses incurred by Lenders in connection with the preparation, execution, delivery, filing, and administration of this Amendment (including, without limitation, Attorneys' Costs incurred in connection with the preparation of this Amendment and advising Lender as to its rights, and the cost of any credit verification reports or field examinations of the Borrower' properties or books and records). The Borrower's obligations to Lenders under this **Section 1.07** shall survive termination of this Amendment and repayment of the Borrower' Obligations to Lenders under the Credit Agreement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed by their respective officers thereunto duly authorized, as of the date first above written.

GREEN PLAINS CATTLE COMPANY LLC

By: /s/ Phil Boggs
Name: Phil Boggs
Title: VP Finance & Treasurer

BANK OF THE WEST , as Joint Administrative Agent

By: /s/ Sidney Jordan

Name: Sidney Jordan

Title: Managing Director

BANK OF THE WEST , as Swingline Lender,
and
Lender

By: /s/ Charles Greenway

Name: Charles Greenway

Title: Vice President

ING CAPITAL LLC , as Joint Administrative
Agent,
L/C Issuer, and Lender

By: /s/ Bill Redmond

Name: Bill Redmond

Title: Managing Director

and

By: /s/ Bennett Whitehurst

Name: Bennett Whitehurst

Title: Vice President

RABO AGRIFINANCE LLC , Lender

By: /s/ Deborah Asberry-Chua

Name: Deborah Asberry-Chua

Title: Vice President

FARM CREDIT SERVICES OF AMERICA , Lender

By: /s/ Judson Jesske

Name: Judson Jesske

Title: Vice President

**UNITED FCS, PCA, d/b/a FCS COMMERCIAL
FINANCE GROUP , Lender**

By: /s/ Nee Ly

Name: Nee Ly

Title: Senior Analyst

BANK OF AMERICA, N.A. , Lender

By: /s/ Kory Clark

Name: Kory Clark

Title: Senior Vice President

AMERICAN AGCREDIT, PCA , Lender

By: /s/ Kyle Lucas

Name: Kyle Lucas

Title: VP-Relationship Manager

INTRUST BANK, N.A. , Lender

By: /s/ Shawn Eidson

Name: Shawn Eidson

Title: Sr. Relationship Manager

**AG COUNTRY FARM CREDIT SERVICES,
FLCA , Lender**

By: /s/ Nicole Schwartz

Name: Nicole Schwartz

Title: Vice President

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a) AND SECTION 302 OF THE SARBANES - OXLEY ACT OF 2002**

I, Todd A. Becker, certify that:

1. I have reviewed this Quarterly Report on Form 10- Q of Green Plains Inc. ;
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 3 , 2017

/s/ Todd A. Becker

Todd A. Becker
President and Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER 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 Green Plains Inc. (the “company”) on Form 10-Q for the fiscal quarter ended June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Todd A. Becker, President and Chief Executive Officer of the company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge :

- 1) The Report fully complies with the requirements of Sections 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 .

Date: August 3, 2017

/s/ Todd A. Becker

Todd A. Becker
President and Chief Executive Officer

**CERTIFICATION OF CHIEF FINANCIAL OFFICER 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 Green Plains Inc. (the "company") on Form 10-Q for the fiscal quarter ended June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jerry L. Peters, Chief Financial Officer of the company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge :

- 1) The Report fully complies with the requirements of Sections 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 .

Date: August 3 , 2017

/s/ Jerry L. Peters

Jerry L. Peters
Chief Financial Officer
