

REFINITIV

## DELTA REPORT

### 10-Q

GPRE - GREEN PLAINS INC.

10-Q - SEPTEMBER 30, 2024 COMPARED TO 10-Q - JUNE 30, 2024

The following comparison report has been automatically generated

TOTAL DELTAS 814

█ CHANGES 235

█ DELETIONS 287

█ ADDITIONS 292

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

FORM 10-Q

(Mark One)

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

For the Quarterly Period Ended **June 30, 2024** **September 30, 2024**

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 001-32924

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 68106

(Address of principal executive offices, including zip code)

**(402) 884-8700**

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	GPRE	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (\$232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>		<input type="checkbox"/>
Smaller reporting company	<input type="checkbox"/>	Emerging growth company	<input type="checkbox"/>

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 registrant had **64,655,091** **64,651,183** common stock outstanding as of **August 2, 2024** **October 28, 2024**.

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#### Commonly Used Defined Terms

*Green Plains Inc. and Subsidiaries:*

Green Plains Inc.; Green Plains; the company	Green Plains Inc. and its subsidiaries
FQT	Fluid Quip Technologies, LLC
Green Plains Commodity Management	Green Plains Commodity Management LLC
Green Plains Finance Company	Green Plains Finance Company LLC
Green Plains Grain	Green Plains Grain Company LLC
Green Plains Mount Vernon; Mount Vernon	Green Plains Mount Vernon LLC
Green Plains Obion; Obion	Green Plains Obion LLC
Green Plains Partners; the partnership	Green Plains Partners LP
Green Plains Shenandoah; Shenandoah	Green Plains Shenandoah LLC
Green Plains Trade	Green Plains Trade Group LLC
Green Plains Wood River; Wood River	Green Plains Wood River LLC

*Accounting Defined Terms:*

ASC	Accounting Standards Codification
EBITDA	Earnings before interest expense, 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
SEC	Securities and Exchange Commission
SOFR	Secured Overnight Financing Rate

*Industry and Other Defined Terms:*

ATJ	Alcohol-to-Jet
BlackRock	Funds and accounts managed by BlackRock
the CARES Act	Coronavirus Aid, Relief, and Economic Security Act
CI	Carbon Intensity
COVID-19	Coronavirus Disease 2019
CST™	Clean Sugar Technology™ developed by Fluid Quip Technologies, LLC
DOE	Department of Energy
E10	Gasoline blended with up to 10% ethanol by volume
E15	Gasoline blended with up to 15% ethanol by volume
EIA	U.S. Energy Information Administration
EPA	U.S. Environmental Protection Agency
EV	Electric Vehicle
FFV	Flexible-fuel vehicle
GHG	Greenhouse gas
GP Turnkey Tharaldson	GP Turnkey Tharaldson LLC
IRA	Inflation Reduction Act
LCFS	Low Carbon Fuel Standard
Merger	Merger of GPLP Merger Sub LLC, a Delaware limited liability company and a wholly owned subsidiary of GPLP Holdings Inc., a wholly owned subsidiary of Green Plains ("Holdings"), with and into the partnership, with the partnership surviving such merger
Merger Agreement	Certain Agreement and Plan of Merger, dated as of September 16, 2023, by and among Green Plains Inc., Holdings, GPLP Merger Sub LLC, a wholly owned subsidiary of Holdings, Green Plains Partners LP, and Green Plains Holdings LLC, the general partner of the partnership (the "General Partner")
MmBtu	Million British Thermal Units
Mmg	Million gallons
MSC™	Maximized Stillage Coproducts™ technology developed by Fluid Quip Technologies, LLC
MTBE	Methyl tertiary-butyl ether
RFS	Renewable Fuels Standard
RIN	Renewable identification number
RVO	Renewable volume obligation
SAF	Sustainable Aviation Fuel
Sequence™	A foundational feed ingredient made from a combination of corn and yeast protein, concentrated at 60%
SRE	Small refinery exemption
U.S.	United States
USDA	U.S. Department of Agriculture

## PART 1 – FINANCIAL INFORMATION

### Item 1. Financial Statements.

GREEN PLAINS INC.

#### CONSOLIDATED BALANCE SHEETS

(in thousands, except share amounts)

	June 30, 2024	December 31, 2023

	September 30, 2024	December 31, 2023
(unaudited)		
	ASSETS	ASSETS
	ASSETS	ASSETS
Current assets		
Cash and cash equivalents		
Cash and cash equivalents		
Cash and cash equivalents		
Restricted cash		
Accounts receivable, net of allowances of \$293 and \$85, respectively		
Income taxes receivable		
Inventories		
Prepaid expenses and other		
Derivative financial instruments		
Total current assets		
Property and equipment, net of accumulated depreciation and amortization of \$721,119 and \$686,077, respectively		
Property and equipment, net of accumulated depreciation and amortization of \$730,948 and \$686,077, respectively		
Operating lease right-of-use assets		
Other assets		
Total assets		
	LIABILITIES AND STOCKHOLDERS' EQUITY	LIABILITIES AND STOCKHOLDERS' EQUITY
	LIABILITIES AND STOCKHOLDERS' EQUITY	LIABILITIES AND STOCKHOLDERS' EQUITY
	LIABILITIES AND STOCKHOLDERS' EQUITY	LIABILITIES AND STOCKHOLDERS' EQUITY
Current liabilities		
Accounts payable		
Accounts payable		
Accounts payable		
Accrued and other liabilities		
Derivative financial instruments		
Operating lease current liabilities		
Short-term notes payable and other borrowings		
Current maturities of long-term debt		
Total current liabilities		
Long-term debt		
Operating lease long-term liabilities		
Other liabilities		
Total liabilities		
Commitments and contingencies (Note 13)		
Commitments and contingencies (Note 13)		
Commitments and contingencies (Note 13)		
Commitments and contingencies (Note 14)		
Commitments and contingencies (Note 14)		
Commitments and contingencies (Note 14)		
Stockholders' equity		
Stockholders' equity		
Stockholders' equity		
Common stock, \$0.001 par value; 150,000,000 shares authorized; 67,460,745 and 62,326,622 shares issued, and 64,655,686 and 59,521,563 shares outstanding, respectively		
Common stock, \$0.001 par value; 150,000,000 shares authorized; 67,460,745 and 62,326,622 shares issued, and 64,655,686 and 59,521,563 shares outstanding, respectively		

Common stock, \$0.001 par value; 150,000,000 shares authorized; 67,460,745 and 62,326,622 shares issued, and 64,655,686 and 59,521,563 shares outstanding, respectively
Common stock, \$0.001 par value; 150,000,000 shares authorized; 67,457,478 and 62,326,622 shares issued, and 64,652,419 and 59,521,563 shares outstanding, respectively
Common stock, \$0.001 par value; 150,000,000 shares authorized; 67,457,478 and 62,326,622 shares issued, and 64,652,419 and 59,521,563 shares outstanding, respectively
Common stock, \$0.001 par value; 150,000,000 shares authorized; 67,457,478 and 62,326,622 shares issued, and 64,652,419 and 59,521,563 shares outstanding, respectively
Additional paid-in capital
Retained deficit
Accumulated other comprehensive loss
Accumulated other comprehensive income (loss)
Treasury stock, 2,805,059 shares
Total Green Plains stockholders' equity
Noncontrolling interests
Total stockholders' equity
Total liabilities and stockholders' equity

See accompanying notes to the consolidated financial statements.

GREEN PLAINS INC.							
CONSOLIDATED STATEMENTS OF OPERATIONS							
(unaudited and in thousands, except per share amounts)							
		Three Months Ended June 30,		Six Months Ended June 30,			
		Three Months Ended September 30,		Nine Months Ended September 30,			
		2024	2024	2023	2024	2023	2024
Revenues							
Revenues							
Revenues							
Costs and expenses							
Costs and expenses							
Costs and expenses							
Cost of goods sold (excluding depreciation and amortization expenses reflected below)							
Cost of goods sold (excluding depreciation and amortization expenses reflected below)							
Cost of goods sold (excluding depreciation and amortization expenses reflected below)							
Selling, general and administrative expenses							
Gain on sale of assets							
Depreciation and amortization expenses							
Total costs and expenses							
Operating loss							
Operating income (loss)							
Other income (expense)							
Other income (expense)							
Other income (expense)							
Interest income							
Interest income							
Interest income							
Interest expense							
Other, net							

Total other income (expense)
Loss before income taxes and (loss) income from equity method investees
Income tax benefit (expense)
(Loss) income from equity method investees
Net loss
Income (loss) before income taxes and income (loss) from equity method investees
Income tax benefit
Income (loss) from equity method investees, net of income taxes
Net income (loss)
Net income attributable to noncontrolling interests
Net loss attributable to Green Plains
Net income (loss) attributable to Green Plains
Earnings per share
Earnings per share
Earnings per share
Net loss attributable to Green Plains - basic and diluted
Net loss attributable to Green Plains - basic and diluted
Net loss attributable to Green Plains - basic and diluted
Net income (loss) attributable to Green Plains - basic
Net income (loss) attributable to Green Plains - basic
Net income (loss) attributable to Green Plains - basic
Net income (loss) attributable to Green Plains - diluted
Weighted average shares outstanding
Weighted average shares outstanding
Weighted average shares outstanding
Basic and diluted
Basic and diluted
Basic and diluted
Basic
Basic
Basic
Diluted

See accompanying notes to the consolidated financial statements.

#### GREEN PLAINS INC.

#### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(unaudited and in thousands)

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2024	2023	2024	2023
Net loss	\$ (24,038)	\$ (48,320)	\$ (75,160)	\$ (114,569)
Other comprehensive income, net of tax				
Unrealized (losses) gains on derivatives arising during the period, net of tax benefit (expense) of \$206, (\$222), \$2,122 and \$3,801, respectively	(657)	710	(6,700)	(12,078)
Reclassification of realized losses on derivatives, net of tax benefit of (\$550), (\$1,134), (\$2,232) and (\$1,669), respectively	1,748	3,602	7,053	5,303
Total other comprehensive income (loss), net of tax	1,091	4,312	353	(6,775)
Comprehensive income (loss)	(22,947)	(44,008)	(74,807)	(121,344)

Comprehensive income attributable to noncontrolling interests	312	4,284	602	8,359
Comprehensive loss attributable to Green Plains	<u><u>\$ (23,259)</u></u>	<u><u>\$ (48,292)</u></u>	<u><u>\$ (75,409)</u></u>	<u><u>\$ (129,703)</u></u>

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Net income (loss)	\$ 48,637	\$ 26,292	\$ (26,523)	\$ (88,277)
Other comprehensive income, net of tax				
Unrealized gains (losses) on derivatives arising during the period, net of tax benefit (expense) of (\$121), (\$4,547), \$2,001 and (\$746), respectively	338	14,469	(6,362)	2,391
Reclassification of realized losses on derivatives, net of tax benefit of (\$1,890), (\$3,384), (\$4,122) and (\$5,053), respectively	6,052	10,767	13,105	16,070
Total other comprehensive income, net of tax	6,390	25,236	6,743	18,461
Comprehensive income (loss)	55,027	51,528	(19,780)	(69,816)
Comprehensive income attributable to noncontrolling interests	437	3,981	1,039	12,340
Comprehensive income (loss) attributable to Green Plains	<u><u>\$ 54,590</u></u>	<u><u>\$ 47,547</u></u>	<u><u>\$ (20,819)</u></u>	<u><u>\$ (82,156)</u></u>

See accompanying notes to the consolidated financial statements.

GREEN PLAINS INC.				
CONSOLIDATED STATEMENTS OF CASH FLOWS				
(unaudited and in thousands)				
	2024	2024	2023	2024
Cash flows from operating activities				
Net loss				
Net loss				
Net loss				
Adjustments to reconcile net loss to net cash used in operating activities				
Depreciation and amortization				
Depreciation and amortization				
Depreciation and amortization				
Amortization of debt issuance costs and non-cash interest expense				
Gain on sale of assets				
Inventory lower of cost or net realizable value adjustment				
Loss on extinguishment of debt				
Deferred income taxes				
Stock-based compensation				
Loss (income) from equity method investees				
Loss (income) from equity method investees, net of income taxes				
Other				
Changes in operating assets and liabilities				
Changes in operating assets and liabilities before effects of asset dispositions				
Accounts receivable				
Accounts receivable				
Accounts receivable				
Inventories				

Derivative financial instruments	
Prepaid expenses and other assets	
Accounts payable and accrued liabilities	
Current income taxes	
Other	
Net cash used in operating activities	
Cash flows from investing activities	
Cash flows from investing activities	
Cash flows from investing activities	
Purchases of property and equipment, net	
Purchases of property and equipment, net	
Purchases of property and equipment, net	
Proceeds from the sale of assets	
Investment in equity method investees	
Net cash used in investing activities	
Cash flows from financing activities	
Cash flows from financing activities	
Cash flows from financing activities	
Payments of principal on long-term debt	
Payments of principal on long-term debt	
Payments of principal on long-term debt	
Proceeds from short-term borrowings	
Payments on short-term borrowings	
Payments on extinguishment of non-controlling interest	
Payments of transaction costs	
Payments of dividends and distributions	
Payments of loan fees	
Payments related to tax withholdings for stock-based compensation	
Other financing activities	
Net cash provided by (used in) financing activities	
Net cash used in financing activities	
Net change in cash and cash equivalents, and restricted cash	
Net change in cash and cash equivalents, and restricted cash	
Net change in cash and cash equivalents, and restricted cash	
Cash and cash equivalents, and restricted cash, beginning of period	
Cash and cash equivalents, and restricted cash, end of period	

Continued on the following page

	Six Months Ended		Nine Months Ended	
	June 30,	2024	September 30,	2024
Reconciliation of total cash and cash equivalents, and restricted cash				
Cash and cash equivalents				
Cash and cash equivalents				

Cash and cash equivalents	
Restricted cash	
Total cash and cash equivalents, and restricted cash	
Supplemental investing activities	
Supplemental investing activities	
Supplemental investing activities	
Assets disposed of in sale	
Assets disposed of in sale	
Assets disposed of in sale	
Less: liabilities relinquished	
Net assets disposed	
Supplemental disclosures of cash flow	
Supplemental disclosures of cash flow	
Supplemental disclosures of cash flow	
Cash paid for income taxes, net	
Cash paid for income taxes, net	
Cash paid for income taxes, net	
Cash paid for interest	
Capital expenditures in accounts payable	
Capital expenditures in other liabilities	
Issuance of common stock as a result of the Merger	
Non-cash extinguishment of non-controlling interest within additional paid-in capital	
Non-cash ARO additions	

See accompanying notes to the consolidated financial statements.

#### GREEN PLAINS INC.

#### 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.

On January 9, 2024, the transactions contemplated by the Merger Agreement were completed and the company acquired all of the publicly held common units of the partnership not already owned by the company and its affiliates. Refer to Note 3 **Acquisition—Merger and Dispositions** included herein for more information.

The company also owns a majority interest in FQT, with their results being consolidated in our consolidated financial statements.

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 for complete financial statements, the unaudited consolidated financial statements should be read in conjunction with the company's annual report on Form 10-K for the year ended December 31, 2023, filed with the SEC on February 9, 2024.

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 have been reclassified to conform to the current year presentation. These reclassifications did not affect total revenues, costs and expenses or net income, but increased cost of goods sold and decreased gross margin, within the ethanol production segment. Costs historically reported as operations and maintenance expenses in the consolidated statements of operations are now being reported within cost of goods sold.

#### *Use of Estimates in the Preparation of Consolidated Financial Statements*

The preparation of consolidated financial statements in conformity with GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, 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. Certain accounting policies, including but not limited to those relating to 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*

The company operates within two operating segments: (1) ethanol production, which includes the production, storage and transportation of ethanol, distillers grains, Ultra-High Protein and renewable corn oil and (2) agribusiness and energy services, which includes grain handling and storage, commodity marketing and merchant trading for company-produced and third-party ethanol, distillers grains, renewable corn oil, natural gas and other commodities.

As a result of the Merger, the partnership's operations are included in the ethanol production operating segment.

#### *Cash and Cash Equivalents*

Cash and cash equivalents **includes** bank deposits as well as short-term, highly liquid investments with original maturities of three months or less.

#### *Restricted Cash*

The company has restricted cash, which can only be used for funding letters of credit and for payment towards a credit agreement. Restricted cash also includes cash margins and securities pledged to commodity exchange clearinghouses. To the degree these segregated balances are cash and cash equivalents, they are considered restricted cash on the consolidated balance sheets.

#### *Revenue Recognition*

The company recognizes revenue when obligations under the terms of a contract with a customer are satisfied. Generally, this occurs with the transfer of control of products or services. Revenue is measured as the amount of consideration expected to be received in exchange for transferring goods or providing services. Sales, value add, and other taxes the company collects concurrent with revenue-producing activities are excluded from revenue.

Sales of ethanol, distillers grains, Ultra-High Protein, renewable corn oil, natural gas and other commodities by the company's marketing business are recognized when obligations under the terms of a contract with a customer are satisfied. Generally, this occurs with the transfer of control of products or services. Revenues related to marketing for third parties are presented on a gross basis as the company controls the product prior to the sale to the end customer, takes title of the product and has inventory risk. Unearned revenue is recorded for goods in transit when the company has received payment, but control 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 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. Revenues include net gains or losses from derivatives related to products sold while cost of goods sold includes net gains or losses from derivatives related to commodities purchased. Revenues also include realized gains and losses on related derivative financial instruments and reclassifications of realized gains and losses on cash flow hedges from accumulated other comprehensive income or loss.

Sales of products are recognized when control of the product is transferred to the customer, which depends on the agreed upon shipment or delivery terms.

#### *Shipping and Handling Costs*

The company accounts for shipping and handling activities related to contracts with customers as costs to fulfill its promise to transfer the associated products. Accordingly, the company records customer payments associated with shipping and handling costs as a component of revenue and classifies such costs as a component of cost of goods sold.

#### *Cost of Goods Sold*

Cost of goods sold includes materials, direct labor, shipping, plant overhead and transportation costs. Materials include the cost of corn feedstock, denaturant, and process chemicals. Corn feedstock costs include 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 reclassifications of gains and losses on cash flow hedges from accumulated other comprehensive income or loss. Direct labor includes all compensation and related benefits of non-management personnel involved in production. Shipping costs incurred by the company, including railcar costs, are also reflected in cost of goods sold. Plant overhead consists primarily of plant utilities, repairs and maintenance and outbound freight charges. Transportation costs include railcar leases, freight and shipping of the company's products, as well as storage costs incurred at destination terminals.

The company uses exchange-traded futures and options contracts and forward purchase and sale contracts to attempt to minimize the effect of price changes on ethanol, renewable corn oil, grain and natural gas. 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 basis differences.

primarily in transportation, between the exchange-traded market and local market where the terms of the contract **is** **are** based. Changes in forward purchase contracts and exchange-traded futures and options contracts are recognized as a component of cost of goods sold.

#### Derivative Financial Instruments

The company uses various derivative financial instruments, including exchange-traded futures and exchange-traded and over-the-counter options contracts, to attempt to minimize risk and the effect of commodity price changes including but not limited to, corn, ethanol, natural gas and other agricultural and energy products. 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.

Forward contracts are recorded at fair value unless the contracts qualify for, and the company elects, normal purchase or sale exceptions. Changes in fair value are recorded in operating income unless the contracts qualify for, and the company elects, cash flow hedge accounting treatment.

Certain qualifying derivatives related to ethanol production and agribusiness and energy services are designated as cash flow hedges. The company evaluates the derivative instrument to ascertain its effectiveness prior to entering into cash flow hedges. Unrealized gains and losses are reflected in accumulated other comprehensive income or loss until the gain or loss from the underlying hedged transaction is realized and the physical transaction is completed. 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 current liabilities at fair value.

At times, the company hedges its exposure to changes in inventory values and designates qualifying derivatives as fair value hedges. The carrying amount of the hedged inventory is adjusted in the current period for changes in fair value. Estimated fair values carried at market are based on exchange-quoted prices, adjusted as appropriate for regional location basis values which represent differences in local markets including transportation as well as quality or grade differences. Basis values are generally determined using inputs from broker quotations or other market transactions. However, a portion of the value may be derived using unobservable inputs. Ineffectiveness of the hedges is recognized in the current period to the extent the change in fair value of the inventory is not offset by the change in fair value of the derivative.

#### Investments in Equity Method Investees

The company's equity method investments, which consist primarily of the company's 50% investment in GP Turnkey Tharaldson, including additional contributions during 2024, totaled **\$55.1 million** **\$53.3 million** and \$41.7 million as of **June 30, 2024** **September 30, 2024** and December 31, 2023, respectively, and are reflected in other assets on the consolidated balance sheet. Interest capitalized related to our equity method investments for the **six** **nine** months ended **June 30, 2024** **September 30, 2024** totaled \$0.8 million.

#### Recent Accounting Pronouncements

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280) - Improvements to Reportable Segment Disclosures*, which improves reportable segment disclosure requirements through enhanced disclosures about significant segment expenses. ASU 2023-07 is effective for public entities that are required to report segment information in accordance with Topic 280 for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. The company is currently evaluating the impact of this ASU.

## 2. REVENUE

#### Revenue by Source

The following tables disaggregate revenue by major source (in thousands):

	Three Months Ended June 30, 2024				Three Months Ended September 30, 2024			
	Ethanol Production	Ethanol Production	Agribusiness & Energy Services	Eliminations Total	Ethanol Production	Agribusiness & Energy Services	Eliminations	Total
<b>Revenues</b>								
Revenues from contracts with customers under ASC 606								
Revenues from contracts with customers under ASC 606								
Revenues from contracts with customers under ASC 606								
Ethanol								
Ethanol								
Ethanol								

Distillers grains	
Renewable corn oil	
Other	
Intersegment revenues	
Total revenues from contracts with customers	
Revenues from contracts accounted for as derivatives under ASC 815 (1)	
Ethanol	
Ethanol	
Ethanol	
Distillers grains	
Renewable corn oil	
Other	
Intersegment revenues	
Total revenues from contracts accounted for as derivatives	
Total Revenues	

	Six Months Ended June 30, 2024			Nine Months Ended September 30, 2024					
	Ethanol Production	Ethanol Production	Agribusiness & Energy Services	Eliminations	Total	Ethanol Production	Agribusiness & Energy Services	Eliminations	Total

Revenues	
Revenues from contracts with customers under ASC 606	
Revenues from contracts with customers under ASC 606	
Revenues from contracts with customers under ASC 606	
Ethanol	
Ethanol	
Ethanol	
Distillers grains	
Renewable corn oil	
Other	
Intersegment revenues	
Total revenues from contracts with customers	
Revenues from contracts accounted for as derivatives under ASC 815 (1)	
Ethanol	
Ethanol	
Ethanol	
Distillers grains	
Renewable corn oil	
Other	
Intersegment revenues	
Total revenues from contracts accounted for as derivatives	
Total Revenues	

	Three Months Ended June 30, 2023			Three Months Ended September 30, 2023					
	Ethanol Production	Ethanol Production	Agribusiness & Energy Services	Eliminations	Total	Ethanol Production	Agribusiness & Energy Services	Eliminations	Total

Revenues	
Revenues from contracts with customers under ASC 606	

Revenues from contracts with customers under ASC 606

Revenues from contracts with customers under ASC 606

Ethanol

Ethanol

Ethanol

Distillers grains

Renewable corn oil

Other

Intersegment revenues

Total revenues from contracts with customers

Revenues from contracts accounted for as derivatives under ASC

815 (1)

Ethanol

Ethanol

Ethanol

Distillers grains

Renewable corn oil

Other

Intersegment revenues

Total revenues from contracts accounted for as derivatives

Total Revenues

Six Months Ended June 30, 2023

Ethanol  
Production

Ethanol  
Production

Agribusiness &  
Energy  
Services

Eliminations  
Total

Nine Months Ended September 30, 2023

Ethanol  
Production

Ethanol  
Production

Agribusiness &  
Energy  
Services

Eliminations  
Total

Revenues

Revenues from contracts with customers under ASC 606

Revenues from contracts with customers under ASC 606

Revenues from contracts with customers under ASC 606

Ethanol

Ethanol

Ethanol

Distillers grains

Renewable corn oil

Other

Intersegment revenues

Total revenues from contracts with customers

Revenues from contracts accounted for as derivatives under ASC

815 (1)

Ethanol

Ethanol

Ethanol

Distillers grains

Renewable corn oil

Other

Intersegment revenues

Total revenues from contracts accounted for as derivatives

Total Revenues

(1) Revenues from contracts accounted for as derivatives represent physically settled derivative sales that are outside the scope of ASC 606.

*Major Customers*

Revenues from Customer A represented 13% and 14% of total revenues for both the three and six nine months ended June 30, 2024, respectively, and revenues from Customer B represented 10% of total revenues for the three months ended June 30, 2024, September 30, 2024 recorded within the ethanol production segment. For both the three and six nine months ended June 30, 2023 September 30, 2023, Customer A represented 15% and 14% of total revenues respectively, and revenues from Customer B represented 11% of total revenues for the three months ended June 30, 2023, recorded within the ethanol production segment.

### 3. ACQUISITION MERGER AND DISPOSITIONS

#### *Green Plains Partners Merger*

On January 9, 2024, the transactions contemplated by the Merger Agreement were completed and the company issued approximately 4.7 million shares of common stock to acquire all of the publicly held common units of the partnership not already owned by the company prior to the Merger at a fixed exchange ratio of 0.405 shares of the company's common

stock, par value \$0.001 per share, along with \$2.50 of cash consideration for each partnership common unit. The total consideration as a result of the Merger was \$143.1 million, which was comprised of \$29.2 million in cash and \$113.9 million of common stock exchanged. As a result of the Merger, the partnership's common units are no longer publicly traded.

The interests in the partnership owned by the company and its subsidiaries remain outstanding as limited partner interests in the surviving entity. The General Partner of the partnership will continue to own the non-economic general partner interest in the surviving entity.

Since the company controlled the partnership prior to the Merger and continues to control the partnership after the Merger, the company accounted for the change in its ownership interest in the partnership as an equity transaction during the six nine months ended June 30, 2024 September 30, 2024, which is reflected as a reduction of non-controlling interest with a corresponding increase to common stock and additional paid-in capital. No gain or loss was recognized in the consolidated statements of operations as a result of the Merger.

Prior to the effective time of the Merger on January 9, 2024, public unitholders owned a 49.2% limited partner interest, the company owned a 48.8% limited partner interest and a 2.0% general partner interest in the partnership. The earnings of the partnership that were attributed to its common units held by the public for the year ended December 31, 2023 are reflected in net income attributable to non-controlling interest in the consolidated statements of operations. For the six nine months ended June 30, 2024 September 30, 2024, the non-controlling interest attributed to the partnership common units held by the public of \$133.8 million were recorded as a reduction of non-controlling interest with a corresponding increase to additional paid-in capital.

The company incurred transaction costs of \$5.5 million related to the Merger during the six nine months ended June 30, 2024 September 30, 2024 and \$2.0 million during the year ended December 31, 2023. These costs were directly related to the Merger consisting primarily of financial advisory services, legal services and other professional fees, and were recorded as an offset to the issuance of common stock within additional paid-in capital.

#### *Disposition of Birmingham Terminal*

On September 30, 2024, the company completed the sale of the terminal located in Birmingham, Alabama and certain related assets and transfer of liabilities (the "Birmingham Transaction") for a sale price of \$47.5 million, plus working capital of \$1.4 million. The company recorded a pretax gain on the sale of \$30.7 million. The proceeds from the sale were used to repay the outstanding balance of the Green Plains Partners term loan due July 20, 2026.

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The assets sold and liabilities transferred of the Birmingham Transaction at closing on September 30, 2024 were as follows (in thousands):

**Amounts of Identifiable Assets Disposed and Liabilities Relinquished**

Accounts receivable	\$ 315
Prepaid expenses and other	1,225
Property and equipment	7,012
Operating lease right-of-use assets	2,208
Goodwill	10,598
Accounts payable	(112)
Accrued and other liabilities	(49)
Operating lease current liabilities	(427)
Operating lease long-term liabilities	(2,312)
Other liabilities	(556)
Total identifiable net assets disposed	<u><u>17,902</u></u>

The amounts reflected above represent amounts subject to post-closing working capital adjustments, which had not yet occurred as of September 30, 2024.

*Disposition of the Atkinson Ethanol Plant*

On September 7, 2023, the company completed the sale of the plant located in Atkinson, Nebraska and certain related assets and transfer of liabilities (the "Atkinson Transaction") for a sale price of \$22.9 million, plus working capital of \$1.1 million. Correspondingly, the company entered into a separate asset purchase agreement with the partnership for \$2.1 million to acquire the storage assets and the associated railcar operating leases. The divested assets were reported within the company's ethanol production and agribusiness and energy services segments. The company recorded a pretax gain on the sale of the Atkinson plant of \$4.1 million recorded within corporate activities.

The assets sold and liabilities transferred of the Atkinson Transaction at closing on September 7, 2023 were as follows (in thousands):

**Amounts of Identifiable Assets Disposed and Liabilities Relinquished**

Inventories	3,164
Prepaid expenses and other	423
Property and equipment	15,199
Operating lease right-of-use assets	3,428
Accrued and other liabilities	(162)
Operating lease current liabilities	(1,332)
Operating lease long-term liabilities	(2,096)
Other liabilities	(189)
Total identifiable net assets disposed	<u><u>18,435</u></u>

**4. FAIR VALUE DISCLOSURES**

The following methods, assumptions and valuation techniques were used in estimating 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.

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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 and energy services segment as well as forward commodity purchase and sale contracts are valued at nearby futures values, plus or minus nearby basis values, which represent differences in local markets, including transportation or commodity quality or grade differences.

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.

Derivative contracts include exchange-traded commodity futures and options contracts and forward commodity purchase and sale contracts. Exchange-traded futures and options contracts are valued based on unadjusted quoted prices in active markets and are classified in Level 1. The majority of the company's exchange-traded futures and options contracts are cash-settled on a daily basis.

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, 2024			Fair Value Measurements at September 30, 2024			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Total
<b>Assets</b>							
Cash and cash equivalents							
Cash and cash equivalents							
Cash and cash equivalents							
Restricted cash							
Inventories carried at market							
Derivative financial instruments - assets							
Other assets							
Total assets measured at fair value							
<b>Liabilities</b>							
Liabilities							
Liabilities							
Liabilities							
Accounts payable (1)							
Accounts payable (1)							
Accounts payable (1)							
Accrued and other liabilities (2)							
Derivative financial instruments - liabilities							
Other liabilities (2)							
Total liabilities measured at fair value							

#### Fair Value Measurements at December 31, 2023

	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Total
<b>Assets</b>					
Cash and cash equivalents	\$	349,574	\$	—	\$ 349,574
Restricted cash		29,188		—	29,188
Inventories carried at market		—		45,898	45,898
Derivative financial instruments - assets		—		13,311	13,311
Total assets measured at fair value	\$	378,762	\$	59,209	\$ 437,971
<b>Liabilities</b>					
Accounts payable (1)	\$	—	\$	54,716	\$ 54,716
Accrued and other liabilities (2)		—		9,917	9,917
Derivative financial instruments - liabilities		—		10,577	10,577
Other liabilities (2)		—		659	659

Total liabilities measured at fair value	\$ —	\$ 75,869	\$ 75,869
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(1) Accounts payable is generally stated at historical amounts with the exception of \$30.1 million \$20.8 million and \$54.7 million at June 30, 2024 September 30, 2024 and December 31, 2023, respectively, related to certain delivered inventory for which the payable fluctuates based on changes in commodity prices. These payables are hybrid financial instruments for which the company has elected the fair value option.

(2) As of June 30, 2024 September 30, 2024 and December 31, 2023, respectively, accrued and other liabilities includes \$3.3 million \$2.1 million and \$9.9 million and other liabilities includes \$1.4 million \$1.0 million and \$0.7 million of consideration related to potential earn-out payments recorded at fair value.

As of June 30, 2024 September 30, 2024, the fair value of the company's debt was approximately \$561.8 million \$509.8 million compared with a book value of \$610.2 million \$556.2 million. At December 31, 2023, the fair value of the company's debt was approximately \$585.0 million compared with a book value of \$599.7 million. The company estimated the fair value of its outstanding debt using Level 2 inputs. The company believes the fair value of its accounts receivable approximated book value, which was \$99.1 million \$74.7 million and \$94.4 million at June 30, 2024 September 30, 2024 and December 31, 2023, respectively.

Although the company currently does not have any recurring Level 3 financial measurements, the fair values of tangible assets and goodwill acquired represent Level 3 measurements which were derived using a combination of the income approach, market approach and cost approach for the specific assets or liabilities being valued.

## 5. SEGMENT INFORMATION

The company reports the financial and operating performance for the following two operating segments: (1) ethanol production, which includes the production, storage and transportation of ethanol, distillers grains, Ultra-High Protein and renewable corn oil and (2) agribusiness and energy services, which includes grain handling and storage, commodity marketing and merchant trading for company-produced and third-party ethanol, distillers grains, Ultra-High Protein, renewable corn oil, natural gas and other commodities.

As a result of the Merger, the partnership's operations are included in the ethanol production operating segment. The following changes were made to the company's operating segments:

- The revenue and operating results from fuel storage and transportation services previously disclosed within the partnership segment are now included within the ethanol production segment.
- Intersegment activities between the partnership and Green Plains Trade associated with ethanol storage and transportation services previously treated like third-party transactions and eliminated on a consolidated level are now eliminated within the ethanol production segment.

Intersegment activities between the partnership and Green Plains Trade associated with terminal services transacted with the agribusiness and energy services segment will continue to be eliminated on a consolidated level.

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, as well as gain on sale of assets.

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, Ultra-High Protein and renewable corn oil for the ethanol production 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		Six Months Ended			
	June 30,		June 30,			
	Three Months Ended	September 30,	Nine Months Ended	September 30,		
	2024	2024	2023	2024	2023	
Revenues					2023	
Ethanol production					2024	
Ethanol production					2024	
Ethanol production					2023	
Revenues from external customers					2023	
Revenues from external customers					2024	
Revenues from external customers					2023	
Intersegment revenues					2024	
Total segment revenues					2023	

Agribusiness and energy services

Revenues from external customers

Revenues from external customers

Revenues from external customers

Intersegment revenues

Total segment revenues

Revenues including intersegment activity

Intersegment eliminations

Refer to Note 2  Revenue, for further disaggregation of revenue by operating segment.

	Three Months Ended		Six Months Ended			
	June 30,		June 30,			
	September 30,		September 30,			
	2024	2024	2023	2024	2023	
Cost of goods sold						
Ethanol production <sup>(1)</sup>						
Ethanol production <sup>(1)</sup>						
Ethanol production <sup>(1)</sup>						
Agribusiness and energy services						
Intersegment eliminations	\$					
			Three Months Ended		Six Months Ended	
	June 30,		June 30,		June 30,	
	2024	2024	2023	2024	2023	
Gross margin						
Ethanol production <sup>(1)</sup>	\$	30,390	\$	9,057	\$	27,747
Agribusiness and energy services		7,433		6,414		18,443
	\$	37,823	\$	15,471	\$	46,190
			Three Months Ended		Six Months Ended	
	June 30,		June 30,		June 30,	
	2024	2024	2023	2024	2023	
Depreciation and amortization						
Ethanol production	\$	20,544	\$	23,253	\$	41,078
Agribusiness and energy services		497		536		1,002
Corporate activities		543		837		991
	\$	21,584	\$	24,626	\$	43,071
			Three Months Ended		Six Months Ended	
	June 30,		June 30,		June 30,	
	2024	2024	2023	2024	2023	
Operating income (loss)						
Ethanol production <sup>(2)</sup>	\$	(2,213)	\$	(25,139)	\$	(35,866)
Agribusiness and energy services		2,166		2,173		8,170
Corporate activities		(17,664)		(19,514)		(34,904)
	\$	(17,711)	\$	(42,480)	\$	(62,600)
			Three Months Ended		Nine Months Ended	
	September 30,		September 30,		September 30,	
	2024	2024	2023	2024	2023	
Gross margin						

Ethanol production (1) (3)	\$ 66,313	\$ 58,973	\$ 94,060	\$ 59,615
Agribusiness and energy services	11,796	15,789	30,239	31,309
	<u>\$ 78,109</u>	<u>\$ 74,762</u>	<u>\$ 124,299</u>	<u>\$ 90,924</u>

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2024	2023	2024	2023
Depreciation and amortization				
Ethanol production	\$ 21,444	\$ 22,596	\$ 62,522	\$ 69,603
Agribusiness and energy services	505	534	1,507	1,883
Corporate activities (2)	4,121	769	5,112	2,425
	<u>\$ 26,070</u>	<u>\$ 23,899</u>	<u>\$ 69,141</u>	<u>\$ 73,911</u>

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2024	2023	2024	2023
Operating income (loss)				
Ethanol production (3)	\$ 35,240	\$ 23,931	\$ (626)	\$ (43,158)
Agribusiness and energy services	7,830	11,313	16,000	17,612
Corporate activities (4)	12,982	(14,070)	(21,922)	(52,300)
	<u>\$ 56,052</u>	<u>\$ 21,174</u>	<u>\$ (6,548)</u>	<u>\$ (77,846)</u>

(1) Costs historically reported as operations and maintenance expenses in the consolidated statements of operations are now being reported within cost of goods sold, resulting in increased cost of goods sold and decreased gross margin within the ethanol production segment.

(2) **Operating loss** Depreciation and amortization for ethanol corporate activities includes impairment of a research and development technology intangible asset of \$3.5 million for the three and nine months ended September 30, 2024.

(3) Ethanol production includes an inventory lower of average cost or net realizable value adjustment of \$9.5 million \$10.1 million for the three and six nine months ended June 30, 2023 September 30, 2024 and of \$1.7 million for the three and nine months ended September 30, 2023.

(4) Corporate activities include a pretax gain on sale of assets of \$30.7 million for the three and nine months ended September 30, 2024 and of \$5.7 million for the three and nine months ended September 30, 2023.

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

	June 30, 2024	December 31, 2023
	September 30, 2024	December 31, 2023
Total assets (1)		
Ethanol production		
Ethanol production		
Ethanol production		
Agribusiness and energy services		
Corporate assets		
Intersegment eliminations	\$	

(1) Asset balances by segment exclude intercompany balances.

## 6. INVENTORIES

Inventories are carried at the lower of cost or net realizable value, except fair-value hedged inventories. Raw materials and finished goods inventories are valued under the first in, first out (FIFO) or weighted average cost method at the lower of average cost or net realizable value. The company recorded a \$10.1 million and \$2.6 million lower of cost or net realizable value inventory adjustment associated with finished goods in cost of goods sold within the ethanol production segment as of September 30, 2024 and December 31, 2023, respectively.

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

	June 30, 2024	December 31, 2023
	September 30, 2024	December 31, 2023
Finished goods		
Commodities held for sale		
Raw materials		
Work-in-process		
Supplies and parts	\$ —	\$ —

## 7. DERIVATIVE FINANCIAL INSTRUMENTS

At June 30, 2024 September 30, 2024, the company's consolidated balance sheet reflected unrealized losses gains of \$2.8 million \$3.6 million, net of tax, in accumulated other comprehensive loss income. The company expects these items will be reclassified as operating loss income over the next 12 months as a result of hedged transactions that are forecasted to occur. The amount realized in operating loss 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'	
	Fair Value	Fair Value
	June 30, 2024	June 30, 2024
	June 30, 2024	June 30, 2024
	September 30, 2024	September 30, 2024
	September 30, 2024	September 30, 2024
	September 30, 2024	September 30, 2024
Derivative financial instruments - forwards		
Derivative financial instruments - forwards		
Derivative financial instruments - forwards	\$ 4,614	\$ 13,311
Other assets		
Other liabilities		
Other liabilities		
Other liabilities		
Total		
Total		
Total		

(1) At June 30, 2024 September 30, 2024, derivative financial instruments, as reflected on the balance sheet, includes net unrealized gains on exchange-traded futures and options contracts of \$13.0 million \$17.4 million, which included \$0.2 million \$6.5 million of net unrealized losses gains on derivative financial instruments designated as

cash flow hedging instruments, \$0.8 million \$1.3 million of unrealized gains losses on derivative financial instruments designated as fair value hedging instruments, and the balance representing economic hedges.

(2) At December 31, 2023, derivative financial instruments, as reflected on the balance sheet, includes net unrealized gains on exchange-traded futures and options contracts of \$6.5 million, which include \$0.7 million of net unrealized gains on derivative financial instruments designated as cash flow hedging instruments, \$0.7 million of unrealized gains on derivative financial instruments designated as fair value hedging instruments, and the balance representing economic hedges.

Refer to Note 4 — Fair Value Disclosures, which contains fair value information related to derivative financial instruments.

**Effect of Derivative Instruments on Consolidated Balance Sheets, Consolidated Statements of Operations and Consolidated Statements of 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):

		Amount of Gain (Loss) Reclassified from Accumulated Other Comprehensive Income into Income								
Location of Gain (Loss) Reclassified from Accumulated Other Comprehensive Income into Income	Location of Gain (Loss) Reclassified from Accumulated Other Comprehensive Income into Income	Three Months Ended June 30,		Six Months Ended June 30,		Location of Gain (Loss) Reclassified from Accumulated Other Comprehensive Income into Income	Three Months Ended September 30,		Nine Months Ended September 30,	
		2024	2023	2024	2023		2024	2023	2024	2023
Revenues										
Cost of goods sold										
Net loss recognized in loss before income taxes										
Net loss recognized in income (loss) before income taxes										

		Amount of Gain (Loss) Recognized in Other Comprehensive Income on Derivatives								
Gain (Loss) Recognized in Other Comprehensive Income on Derivatives	Gain (Loss) Recognized in Other Comprehensive Income on Derivatives	Three Months Ended June 30,		Six Months Ended June 30,		Gain (Loss) Recognized in Other Comprehensive Income on Derivatives	Three Months Ended September 30,		Nine Months Ended September 30,	
		2024	2023	2024	2023		2024	2023	2024	2023
Commodity contracts										

A portion of the company's derivative instruments are considered economic hedges and as such are not designated as hedging instruments. The company uses exchange-traded futures and options contracts to manage its net position of product inventories and forward cash purchase and sales contracts to reduce price risk caused by market fluctuations. Derivatives, including exchange traded contracts and forward commodity purchase or sale contracts, and inventories of certain agricultural products, which include amounts acquired under deferred pricing contracts, are stated at fair value. Fair value estimates are based on exchange-quoted prices, adjusted as appropriate for regional location basis value, which represent differences in local markets including transportation as well as quality or grade differences.

		Amount of Gain (Loss) Recognized in Income on Derivatives											
Derivatives Not Designated as Hedging Instruments	Derivatives Not Designated as Hedging Instruments	Location of Gain (Loss) Recognized in Income on Derivatives		Three Months Ended June 30,		Six Months Ended June 30,		Derivatives Not Designated as Hedging Instruments	Three Months Ended September 30,		Nine Months Ended September 30,		
		2024	2023	2024	2023	2024	2023		2024	2023	2024	2023	
Exchange-traded futures and options													
Forwards													
Exchange-traded futures and options													

## Forwards

Net gain (loss)  
recognized in income  
(loss) before income  
taxes

The following amounts were recorded on the consolidated balance sheets related to cumulative basis adjustments for the fair value hedged items (in thousands):

		December								December			
		June 30, 2024		31, 2023						September 30, 2024		31, 2023	
Line Item in the Consolidated Balance Sheet in Which the Hedged Item is Included	Line Item in the Consolidated Balance Sheet in Which the Hedged Item is Included	Cumulative Amount of Fair Value Hedging Adjustment	Carrying Amount Included in the Carrying Amount of the Hedged Assets	Cumulative Amount of Fair Value Hedging Adjustment	Carrying Amount Included in the Carrying Amount of the Hedged Assets	Line Item in the Consolidated Balance Sheet	Carrying Amount in Which the Hedged Item is Included	Cumulative Amount of Fair Value Hedging Adjustment	Carrying Amount Included in the Carrying Amount of the Hedged Assets	Cumulative Amount of Fair Value Hedging Adjustment	Carrying Amount Included in the Carrying Amount of the Hedged Assets	Cumulative Amount of Fair Value Hedging Adjustment	
Inventories													

## Effect of Cash Flow and Fair Value Hedge Accounting on the Statements of Operations

	Location and Amount of Gain (Loss) Recognized in Income on Cash Flow and Fair Value Hedging Relationships for the Three Months Ended June 30,				Location and Amount of Gain (Loss) Recognized in Income on Cash Flow and Fair Value Hedging Relationships for the Three Months Ended September 30,			
	2024		2023		2024		2023	
	Revenue	Cost of Goods Sold	Revenue	Cost of Goods Sold	Revenue	Cost of Goods Sold	Revenue	Cost of Goods Sold
Loss on cash flow hedging relationships								
Gain (loss) on cash flow hedging relationships								
Commodity contracts								
Commodity contracts								
Commodity contracts								
Amount of loss on exchange-traded futures reclassified from accumulated other comprehensive income into income								
Amount of loss on exchange-traded futures reclassified from accumulated other comprehensive income into income								
Amount of loss on exchange-traded futures reclassified from accumulated other comprehensive income into income								
Gain (loss) on exchange-traded futures reclassified from accumulated other comprehensive income into income								
Gain (loss) on exchange-traded futures reclassified from accumulated other comprehensive income into income								
Gain (loss) on exchange-traded futures reclassified from accumulated other comprehensive income into income								
Gain (loss) on fair value hedging relationships								
Gain (loss) on fair value hedging relationships								

Gain (loss) on fair value hedging relationships  
 Commodity contracts  
 Commodity contracts  
 Commodity contracts  
 Fair-value hedged inventories  
 Fair-value hedged inventories  
 Fair-value hedged inventories  
 Exchange-traded futures designated as  
 hedging instruments  
 Total amounts of income and expense line  
 items presented in the statement of operations  
 in which the effects of cash flow or fair value  
 hedges are recorded

	Location and Amount of Gain (Loss) Recognized in Income on Cash Flow and Fair Value Hedging Relationships for the Six Months Ended June 30,				Location and Amount of Gain (Loss) Recognized in Income on Cash Flow and Fair Value Hedging Relationships for the Nine Months Ended September 30,				
	2024		2024		2023		2024		
	Revenue	Revenue	Cost of Goods Sold	Revenue	Cost of Goods Sold	Revenue	Cost of Goods Sold	Revenue	Cost of Goods Sold
Gain (loss) on cash flow hedging relationships									
Commodity contracts									
Commodity contracts									
Commodity contracts									
Amount of gain (loss) on exchange traded futures reclassified from accumulated other comprehensive income into income									
Amount of gain (loss) on exchange traded futures reclassified from accumulated other comprehensive income into income									
Amount of gain (loss) on exchange traded futures reclassified from accumulated other comprehensive income into income									
Gain (loss) on exchange traded futures reclassified from accumulated other comprehensive income into income									
Gain (loss) on exchange traded futures reclassified from accumulated other comprehensive income into income									
Gain (loss) on exchange traded futures reclassified from accumulated other comprehensive income into income									
Gain (loss) on fair value hedging relationships									
Gain (loss) on fair value hedging relationships									
Gain (loss) on fair value hedging relationships									
Commodity contracts									
Commodity contracts									
Commodity contracts									
Fair-value hedged inventories									
Fair-value hedged inventories									
Fair-value hedged inventories									

Exchange-traded futures designated as hedging instruments

Total amounts of income and expense line items presented in the statement of operations in which the effects of cash flow or fair value hedges are recorded

The notional volume of open commodity derivative positions as of **June 30, 2024** **September 30, 2024**, are as follows (in thousands):

Derivative Instruments		Exchange-Traded (1)		Unit of Measure	Commodity	Net Long & (Short)	
		Net Long & (Short)	Long			(Short)	Bushels
Futures	Futures	(18,380)		Bushels			Bushels
Futures	Futures	12,300	(3) (3)		Bushels		Corn Futures
Futures	Futures	(660)	(4) (4)		Bushels		Corn Futures
Futures	Futures	(3,864)		Gallons			Gallons
Futures	Futures	(34,230)	(3) (3)		Gallons		Ethanol Futures
Futures	Futures	(1,958)		MmBTU			MmBTU
Futures	Futures	9,513	(3) (3)		MmBTU		Natural Gas Futures
Futures	Futures	(5,760)	(4) (4)		MmBTU		Natural Gas Futures
Futures	Futures	13		Tons			Tons
Options	Options	961		Bushels			Bushels
Options		(3,384)			Bushels		Soybeans
Options		3					Soybean Meal
Options		765					Natural Gas
Forwards	Forwards	25,289	—	—	Bushels		Corn Forwards
Forwards	Forwards	—	(226,298)	(226,298)	Gallons		Ethanol Forwards
Forwards	Forwards	124	(231)	(231)	Tons		Distillers Grains Forwards
Forwards	Forwards	—	(58,803)	(58,803)	Pounds		Renewable Corn Oil Forwards
Forwards	Forwards	8,788	(12)	(12)	MmBTU		Natural Gas Forwards

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

(2) Notional volume of non-exchange-traded forward physical contracts are presented on a gross long and (short) position basis, including both fixed-price and basis contracts, for which only the basis portion of the contract price is fixed.

(3) Notional volume of exchange-traded futures used for cash flow hedges.

(4) Notional volume of exchange-traded futures 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 of \$0.5 million \$1.0 million and \$3.3 million for the three and nine months ended September 30, 2024, respectively, and net losses of \$0.1 million and net gains of \$2.3 million \$4.1 million.

million for the three and **six** **nine** months ended **June 30, 2024**, respectively, and net gains of \$0.4 million and \$4.2 million for the three and six months ended June 30, **September 30, 2023**, respectively, on energy trading contracts.

## 8. DEBT

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

	June 30, 2024	December 31, 2023	
	September 30, 2024	December 31, 2023	
Corporate			
2.25% convertible notes due 2027 <sup>(1)</sup>			
2.25% convertible notes due 2027 <sup>(1)</sup>			
2.25% convertible notes due 2027 <sup>(1)</sup>			
Green Plains SPE LLC			
\$125.0 million junior secured mezzanine notes due 2026 <sup>(2)</sup>			
\$125.0 million junior secured mezzanine notes due 2026 <sup>(2)</sup>			
\$125.0 million junior secured mezzanine notes due 2026 <sup>(2)</sup>			
Green Plains Shenandoah			
\$75.0 million loan agreement <sup>(3)</sup>			
\$75.0 million loan agreement <sup>(3)</sup>			
\$75.0 million loan agreement <sup>(3)</sup>			
Green Plains Partners			
\$60.0 million term loan <sup>(4)</sup>			
\$60.0 million term loan <sup>(4)</sup>			
\$60.0 million term loan <sup>(4)</sup>			
Other			
Total book value of long-term debt			
Unamortized debt issuance costs			
Less: current maturities of long-term debt			
Total long-term debt			

(1) The 2.25% notes had **\$3.4 million** \$3.0 million and \$4.0 million of unamortized debt issuance costs as of **June 30, 2024** September 30, 2024 and December 31, 2023, respectively.

(2) The junior notes had \$0.3 million and \$0.4 million of unamortized debt issuance costs as of **June 30, 2024** September 30, 2024 and December 31, 2023, respectively.

(3) The loan had \$0.3 million of unamortized debt issuance costs as of both **June 30, 2024** September 30, 2024 and December 31, 2023.

(4) **Proceeds from the Birmingham Transaction were used to repay the outstanding balance of the term loan on September 30, 2024.** The term loan had **\$0.2 million** and \$0.3 million of unamortized debt issuance costs as of **June 30, 2024** and December 31, 2023, respectively.

The components of short-term notes payable and other borrowings are as follows (in thousands):

	June 30, 2024	December 31, 2023	
	September 30, 2024	December 31, 2023	
Green Plains Finance Company, Green Plains Grain and Green Plains Trade			
\$350.0 million revolver			
\$350.0 million revolver			
\$350.0 million revolver			
Green Plains Commodity Management			
\$40.0 million hedge line			
\$40.0 million hedge line			
\$40.0 million hedge line			
\$			
Corporate Activities			

In March 2021, the company issued an aggregate \$230.0 million of 2.25% convertible senior notes due on March 15, 2027, or the 2.25% notes. The 2.25% notes bear interest at a rate of 2.25% per year, payable on March 15 and September 15 of each year. The 2.25% notes are senior, unsecured obligations of the company. The 2.25% notes are convertible, at the option of the holders, into consideration consisting of, at the company's election, cash, shares of the company's common stock, or a combination of cash and

stock (and cash in lieu of fractional shares). However, before September 15, 2026, the 2.25% notes will not be convertible unless certain conditions are satisfied. The initial conversion rate is 31.6206 shares of the company's common stock per \$1,000 principal amount of 2.25% notes (equivalent to an initial conversion price of approximately \$31.62 per share of the company's common stock), representing an approximately 37.5% premium over the offering price of the company's common stock. The conversion rate is subject to adjustment upon the occurrence of certain events, including but not limited to; the event of a stock dividend or stock split; the issuance of additional rights, options and warrants; spinoffs; or a tender or exchange offering. In addition, the company may be obligated to increase the conversion rate for any conversion that occurs in connection with certain corporate events, including the company's calling the 2.25% notes for redemption.

On and after March 15, 2024, and prior to the maturity date, the company may redeem, for cash, all, but not less than all, of the 2.25% notes if the last reported sale price of the company's common stock equals or exceeds 140% of the applicable conversion price on (i) at least 20 trading days during a 30 consecutive trading day period ending on the trading day immediately prior to the date the company delivers notice of the redemption; and (ii) the trading day immediately before the date of the redemption notice. The redemption price will equal 100% of the principal amount of the 2.25% notes to be redeemed, plus any accrued and unpaid interest to, but excluding, the redemption date. In addition, upon the occurrence of a "fundamental change" (as defined in the indenture for the 2.25% notes), holders of the 2.25% notes will have the right, at their option, to require the company to repurchase their 2.25% notes for cash at a price equal to 100% of the principal amount of the 2.25% notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

#### Ethanol Production Segment

On February 9, 2021, Green Plains SPE LLC, a wholly-owned special purpose subsidiary and parent of Green Plains Obion and Green Plains Mount Vernon, issued \$125.0 million of junior secured mezzanine notes due 2026 (the "Junior Notes") with BlackRock, a holder of a portion of the company's common stock.

The Junior Notes will mature on February 9, 2026 and are secured by a pledge of the membership interests in and the real property owned by Green Plains Obion and Green Plains Mount Vernon. The proceeds of the Junior Notes were used to construct high protein processing systems at the Green Plains Obion and Green Plains Mount Vernon facilities. The Junior Notes accrue interest at an annual rate of 11.75%. However, subject to the satisfaction of certain conditions, Green Plains SPE LLC may elect to pay an amount in cash equal to interest accruing at a rate of 6.00% per annum plus an amount equal to interest accruing at a rate of 6.75% per annum to be paid in kind. The entire outstanding principal balance, plus any accrued and unpaid interest is due upon maturity. Green Plains SPE LLC is required to comply with certain financial covenants regarding minimum liquidity at Green Plains and a maximum aggregate loan to value. The Junior Notes can be retired or refinanced after 42 months with no prepayment premium. The Junior Notes have an unsecured parent guarantee from the company and have certain limitations on distributions, dividends or loans to the company unless there will not exist any event of default.

On September 3, 2020, Green Plains Wood River and Green Plains Shenandoah, wholly-owned subsidiaries of the company, entered into a \$75.0 million loan agreement with MetLife Real Estate Lending LLC. The loan matures on September 1, 2035 and is secured by substantially all of the assets of the Shenandoah facility. During the second quarter of 2024, the agreement was modified to remove the Wood River facility from the assets considered to be secured under the loan agreement and Green Plains Wood River was removed as a counterparty to the loan agreement. The proceeds from the loan were used to add MSC™ technology at the Wood River and Shenandoah facilities as well as other capital expenditures.

The loan bears interest at a fixed rate of 5.02%, plus an interest rate premium, of 1.5% until the loan is fully drawn. The remaining availability was drawn in the first quarter of 2022. Beginning in the second quarter of 2022, the interest rate premium may be adjusted subject to quarterly from adjustments, of 0.00% to 1.50% based on the leverage ratio of total funded debt to EBITDA of Shenandoah. Principal payments of \$1.5 million per year began in October 2022. Prepayments are prohibited until September 2024. Financial covenants of the loan agreement include a minimum loan to value ratio of 50%, a minimum fixed charge coverage ratio of 1.25x, a total debt service reserve of six months of future principal and interest payments and a minimum working capital requirement at Green Plains of not less than \$0.10 per gallon of nameplate capacity or \$90.3 million. The loan is guaranteed by the company and has certain limitations on distributions, dividends or loans to Green Plains by Shenandoah unless immediately after giving effect to such action, there will not exist any event of default. At June 30, 2024 September 30, 2024, the interest rate on the loan was 5.02% 5.52%.

Green Plains Partners has had a term loan to fund working capital, capital expenditures and other general partnership purposes. The term loan has a maturity date of July 20, 2026. Interest on the term loan is based on 3-month SOFR plus 8.26%, and is payable on the 15th day of each March, June, . At September and December. The term loan does not require any principal payments; however, the partnership has the option to prepay \$1.5 million per quarter beginning twelve months after the closing date. The partnership repurchased \$1.0 million of the outstanding notes during the six months ended June 30, 2023. Prepayments totaling \$1.5 million and \$3.0 million were made during the three and six months ended June 30, 2024, respectively.

The partnership's obligations under the term loan are secured by a first priority lien on (i) the equity interests 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 any agreements with Green Plains Trade, (iii) all proceeds and products of the equity interests of the partnership's present and future subsidiaries and its personal property and (iv) substantially all of the partnership's real property and material leases of real property. The terms impose affirmative and negative covenants, including restrictions on 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 term loan also requires the partnership to maintain a maximum consolidated leverage ratio and a minimum consolidated debt service coverage ratio as of the end of any fiscal quarter, each of which is calculated on a pro forma basis with respect to acquisitions and divestitures occurring during the applicable period. The maximum consolidated leverage ratio is required to be no more than 2.50x. The minimum debt service coverage ratio is required to be no less than 1.10x. The consolidated leverage ratio is calculated by dividing total funded indebtedness by the sum of the four preceding fiscal quarters' consolidated EBITDA. The consolidated debt service coverage ratio is calculated by taking the sum of the four preceding fiscal quarters' consolidated EBITDA minus income taxes and consolidated capital expenditures for such period divided by the sum of the four preceding fiscal quarters' consolidated interest charges plus consolidated scheduled funded debt payments for such period.

Under the terms of the loan, the partnership has no restrictions on the amount of quarterly distribution payments, so long as (i) no default has occurred and is continuing, or would result from payment of the distribution, and (ii) the partnership and its subsidiaries are in compliance with its financial covenants and remain in compliance after payment of the distribution. The term loan is not guaranteed by the company. At June 30, 2024, 30, 2024, the interest rate on the term loan was 13.60% 13.21%. On September 30, 2024, the proceeds from the Birmingham Transaction were used to repay the outstanding principal and interest of the loan in full. Prepayments totaling \$53.0 million and \$56.0 million were

made during the three and nine months ended September 30, 2024, respectively, and \$1.5 million and \$3.0 million during the three and nine months ended September 30, 2023, respectively.

The company also has small equipment financing loans, finance leases on equipment or facilities, and other forms of debt financing.

#### *Agribusiness and Energy Services Segment*

On March 25, 2022, Green Plains Finance Company, Green Plains Grain and Green Plains Trade (collectively, the "Borrowers"), all wholly owned subsidiaries of the company, together with the company, as guarantor, entered into a five-year, \$350.0 million senior secured sustainability-linked revolving Loan and Security Agreement (the "Facility") with a group of financial institutions. This transaction refinanced the separate credit facilities previously held by Green Plains Grain and Green Plains Trade. The Facility matures on March 25, 2027.

The Facility includes revolving commitments totaling \$350.0 million and an accordion feature whereby amounts available under the Facility may be increased by up to \$100.0 million of new lender commitments subject to certain conditions. Each SOFR rate loan shall bear interest for each day at a rate per annum equal to the Term SOFR rate for the outstanding period plus a Term SOFR adjustment and an applicable margin of 2.25% to 2.50%, which is dependent on undrawn availability under the Facility. Each base rate loan shall bear interest at a rate per annum equal to the base rate plus the applicable margin of 1.25% to 1.50%, which is dependent on undrawn availability under the Facility. The unused portion of the Facility is also subject to a commitment fee of 0.275% to 0.375%, dependent on undrawn availability. Additionally, the applicable margin and commitment fee are subject to certain increases or decreases of up to 0.10% and 0.025%, respectively, tied to the company's achievement of certain sustainability criteria, including the reduction of GHG emissions, recordable incident rate reduction, increased renewable corn oil production and the implementation of technology to produce sustainable ingredients.

The Facility contains customary affirmative and negative covenants, as well as the following financial covenants to be calculated as of the last day of any month: the current ratio of the Borrowers shall not be less than 1.00 to 1.00; the collateral coverage ratio of the Borrowers shall not be less than 1.20 to 1.00; and the debt to capitalization ratio of the company shall not be greater than 0.60 to 1.00.

The Facility also includes customary events of default, including without limitation, failure to make required payments of principal or interest, material incorrect representations and warranties, breach of covenants, events of bankruptcy and other certain matters. The Facility is secured by the working capital assets of the Borrowers and is guaranteed by the company. At **June 30, 2024** **September 30, 2024**, the interest rate on the Facility was **8.74%** **8.11%**.

Green Plains Commodity Management has an uncommitted \$40.0 million revolving credit facility to finance margins related to its hedging programs, which is secured by cash and securities held in its brokerage accounts. During the first quarter of 2023, this revolving credit facility was extended five years to mature on April 30, 2028. Advances are subject to variable interest rates equal to SOFR plus 1.75%. At **June 30, 2024** **September 30, 2024**, the interest rate on the facility was **7.09%** **6.59%**.

Green Plains Grain has a short-term inventory financing agreement with a financial institution. The company has accounted for the agreement as short-term notes, rather than revenues, and has elected the fair value option to offset fluctuations in market prices of the inventory. This agreement is subject to negotiated variable interest rates. The company had no outstanding short-term notes payable related to the inventory financing agreement as of **June 30, 2024** **September 30, 2024**.

#### *Covenant Compliance*

The company was in compliance with its debt covenants as of **June 30, 2024** **September 30, 2024**.

#### *Restricted Net Assets*

At **June 30, 2024** **September 30, 2024**, there were approximately **\$112.8 million** **\$92.0 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. GOODWILL**

On September 30, 2024, goodwill of \$10.6 million was disposed of in the Birmingham Transaction, which previously was recorded within the ethanol production segment. The carrying amount of goodwill attributable to the ethanol production segment as of September 30, 2024, and December 31, 2023, was \$18.5 million and \$29.1 million, respectively. The company records goodwill within other assets on the consolidated balance sheets.

#### **10. STOCK-BASED COMPENSATION**

The company has an equity incentive plan which reserved a total of **5.7 million** **6.9 million** shares of common stock for issuance pursuant to the plan, of which 2.2 million shares remain available for issuance. 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, performance share awards, 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, with no adjustments 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.

#### Restricted Stock Awards and Deferred Stock Units

The restricted non-vested stock awards and deferred stock units activity for the **six nine** months ended **June 30, 2024** **September 30, 2024** is as follows:

	Non-Vested Shares and Deferred Stock Units	Non-Vested Shares and Deferred Stock Units	Weighted-Average Grant-Date Fair Value	Weighted-Average Remaining Vesting Term (in years)	Non-Vested Shares and Deferred Stock Units	Weighted-Average Grant-Date Fair Value	Weighted-Average Remaining Vesting Term (in years)
<b>Non-Vested at December 31, 2023</b>							
Granted							
Granted							
Granted							
Forfeited							
Forfeited							
Forfeited							
Vested							
Vested							
Vested							
<b>Non-Vested at June 30, 2024</b>							
Non-Vested at June 30, 2024	<u>710,768</u>	<u>\$24.82</u>	<u>2.1</u>				
<b>Non-Vested at September 30, 2024</b>							
Non-Vested at September 30, 2024	<u>705,009</u>	<u>\$24.78</u>	<u>1.9</u>				

#### Performance Share Awards

On March 13, 2024, March 9, 2023, and March 14, 2022, the board of directors granted performance shares to be awarded in the form of common stock to certain participants of the plan. These performance shares vest based on the level of achievement of certain performance goals, including the incremental value achieved from the company's high-protein and clean sugar initiatives, annual production levels and return on investment (ROI). Performance shares granted in 2024 include certain market-based factors requiring a Monte Carlo valuation model to estimate the fair value of the performance shares on the date of the grant. The weighted average assumptions used by the company in applying the Monte Carlo valuation model for performance share grants and related valuation include a risk-free interest rate of 4.44%, dividend yields of 0%, expected volatility of 54.6% and a closing stock price on the date of grant of \$20.21, resulting in an estimated fair value of \$25.23 per share. Performance shares granted in 2023 and 2022 do not contain market-based factors requiring a Monte Carlo valuation model. The performance shares were granted at a target of 100%, but each performance share can be reduced or increased depending on results for the performance period. If the company achieves the maximum performance goals, the maximum amount of shares available to be issued pursuant to the 2024, 2023 and 2022 awards are 1,077,144 performance shares which represents 200% of the 538,572 performance shares which remain outstanding. The actual number of performance shares that will ultimately vest is based on the actual performance targets achieved at the end of the performance period.

On February 18, 2021, the board of directors granted performance shares to be awarded in the form of common stock to certain participants of the plan. The performance shares were granted at a target of 100%, but each performance share was reduced or increased depending on results for the performance period. On February 16, 2024, based on the criteria discussed above, the 118,673 2021 performance shares vested at 115%, which resulted in the issuance of 136,475 shares of common stock.

The non-vested performance share award activity for the **six nine** months ended **June 30, 2024** **September 30, 2024**, is as follows:

	Performance Shares	Performance Shares	Weighted-Average Grant-Date Fair Value	Weighted-Average Remaining Vesting Term (in years)	Performance Shares	Weighted-Average Grant-Date Fair Value	Weighted-Average Remaining Vesting Term (in years)
<b>Non-Vested at December 31, 2023</b>							
Granted							
Granted							
Granted							
Vested							

Vested			
Vested			
Non-Vested at June 30, 2024			
Non-Vested at June 30, 2024			
Non-Vested at June 30, 2024	538,572	\$ 27.82	1.9
Non-Vested at September 30, 2024			
Non-Vested at September 30, 2024			
Non-Vested at September 30, 2024	538,572	\$ 27.82	1.7

#### Green Plains Partners

Green Plains Partners had a long-term incentive plan (LTIP) intended to promote the interests of the partnership, its general partner and affiliates by providing unit-based incentive compensation awards to employees, consultants and directors to encourage superior performance. The LTIP reserved 2.5 million common limited partner units for issuance in the form of options, restricted units, phantom units, distribution equivalent rights, substitute awards, unit appreciation rights, unit awards, profit interest units or other unit-based awards. The partnership measured unit-based compensation related to equity awards in its consolidated financial statements over the requisite service period on a straight-line basis. As a result of the Merger, the LTIP units available for issuance were converted to 1.2 million shares available for issuance under the company's equity incentive plan.

The non-vested unit-based awards activity for the **six nine** months ended **June 30, 2024** **September 30, 2024**, is as follows:

	Non-Vested Units	Non-Vested Units	Weighted-Average Grant-Date Fair Value	Weighted-Average Remaining Vesting Term (in years)	Non-Vested Units	Weighted-Average Grant-Date Fair Value	Weighted-Average Remaining Vesting Term (in years)
<b>Non-Vested at December 31, 2023</b>							
Vested (1)							
Vested (1)							
Vested (1)							
Non-Vested at June 30, 2024 (1)							
Non-Vested at June 30, 2024 (1)							
Non-Vested at June 30, 2024 (1)	—	\$—	0.0				
Non-Vested at September 30, 2024 (1)							
Non-Vested at September 30, 2024 (1)							
Non-Vested at September 30, 2024 (1)	—	\$—	0.0				

(1) Pursuant to the Merger Agreement, each of these awards became fully vested at the effective time of the Merger on January 9, 2024.

#### Stock-Based Compensation Expense

Compensation costs for the stock-based payment plan were **\$3.5 million** **\$3.6 million** and **\$6.6 million** **\$10.2 million** for the three and **six nine** months ended **June 30, 2024** **September 30, 2024**, respectively, and **\$3.8 million** **\$2.7 million** and **\$6.7 million** **\$9.4 million** for the three and **six nine** months ended **June 30, 2023** **September 30, 2023**, respectively. At **June 30, 2024** **September 30, 2024**, there was **\$24.0 million** **\$20.4 million** of unrecognized compensation costs from stock-based compensation related to non-vested awards. This compensation is expected to be recognized over a weighted-average period of approximately **2.0** **1.8** years. The potential tax benefit related to stock-based payment is approximately **23.6%** **23.9%** of these expenses.

#### 10.11. 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.

The company computes diluted EPS by dividing net income on an if-converted basis, adjusted to add back net interest expense related to the convertible debt instruments, 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.

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


	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2024	2023	2024	2023
EPS - basic and diluted				
Net loss attributable to Green Plains	\$ (24,350)	\$ (52,604)	\$ (75,762)	\$ (122,928)
Weighted average shares outstanding - basic and diluted	63,933	58,874	63,637	58,714
EPS - basic and diluted	\$ (0.38)	\$ (0.89)	\$ (1.19)	\$ (2.09)
Anti-dilutive weighted-average convertible debt, warrants and stock-based compensation (1)	7,713	8,459	7,674	8,528

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2024	2023	2024	2023
EPS - basic				
Net income (loss) attributable to Green Plains	\$ 48,200	\$ 22,311	\$ (27,562)	\$ (100,617)
Weighted average shares outstanding - basic	63,946	58,910	63,741	58,780
EPS - basic	\$ 0.75	\$ 0.38	\$ (0.43)	\$ (1.71)
EPS - diluted				
Net income (loss) attributable to Green Plains	\$ 48,200	\$ 22,311	\$ (27,562)	\$ (100,617)
Interest and amortization on 2.25% convertible notes due 2027, net of tax effect	1,209	1,201	—	—
Net income (loss) attributable to Green Plains - diluted	\$ 49,409	\$ 23,512	\$ (27,562)	\$ (100,617)
Weighted average shares outstanding - basic	63,946	58,910	63,741	58,780
Effect of dilutive 2.25% convertible notes due 2027	7,273	7,273	—	—
Effect of dilutive warrants	—	837	—	—
Effect of dilutive stock-based compensation awards	441	382	—	—
Weighted average shares outstanding - diluted	71,660	67,402	63,741	58,780
EPS - diluted	\$ 0.69	\$ 0.35	\$ (0.43)	\$ (1.71)
Anti-dilutive weighted-average convertible debt, warrants and stock-based compensation (1)	—	—	7,687	8,516

(1) The effect for the nine months ended September 30, 2024, and 2023, respectively, the effects related to the company's company's 2.25% convertible debt, notes due in 2027, warrants and certain stock-based compensation awards has been excluded from diluted EPS for the periods presented as the inclusion of these shares would have been anti-dilutive, anti-dilutive.

## 11.12. STOCKHOLDERS' EQUITY

As a result of the Merger, for the six nine months ended June 30, 2024 September 30, 2024, the company issued approximately 4.7 million shares of common stock and recorded par value \$0.001 per share, paid cash consideration of \$29.2 million, extinguished the non-controlling interest attributed to the partnership common units held by the public of \$133.8 million, and capitalized transaction costs of \$7.5 million, within additional paid-in capital. Refer to Note 3 - **Acquisition – Merger and Dispositions** included herein for more information.

Components of stockholders' equity for the three and six nine months ended June 30, 2024 September 30, 2024 and 2023 are as follows (in thousands):

Common Stock	Common Stock	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Total Green Plains Stockholders' Equity	Common Stock	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Total Green Plains Stockholders' Equity
Shares	Shares	Amount	Shares	Amount	Non-Controlling Stockholders' Equity	Shares	Amount	Shares	Amount	Non-Controlling Stockholders' Equity

Balance December 31

Balance, December 31,

2023

Balance, December 31,

2023

Balance, December 31,

2023

Net loss

Other

comprehensive

loss before

reclassification

Amounts

reclassified

from

accumulated

other

comprehensive

loss

Other

comprehensive

loss, net of tax

Investment in

subsidiaries

Partnership

Merger

Stock-based

compensation

Balance, March

31, 2024

Net loss

Other

comprehensive

loss before

reclassification

Amounts

reclassified

from

accumulated

other

comprehensive

loss

Other

comprehensive

income, net of

tax

Investment in

subsidiaries

Stock-based

compensation

Balance, June 30,

2024

Net income

Other

comprehensive

income before

reclassification

Amounts

Amounts  
reclassified  
from  
accumulated  
other  
comprehensive  
loss  
Other  
comprehensive  
income, net of  
tax  
Investment in  
subsidiaries  
Stock-based  
compensation  
Balance,  
September 30,  
2024

31

	Total										
	Common Stock		Additional			Treasury Stock			Green Plains	Non-	Total
	Shares	Amount	Paid-in Capital	Retained Deficit	Accumulated Other Comprehensive Loss	Shares	Amount	Stockholders' Equity	Controlling Interests	Stockholders' Equity	
Balance, December 31, 2022	62,101	\$ 62	1,110,151	\$ (142,417)	\$ (26,591)	2,805	\$ (31,174)	\$ 910,031	\$ 151,035	\$ 1,061,066	
Net loss	—	—	—	(70,324)	—	—	—	(70,324)	4,075	(66,249)	
Cash dividends and distributions declared	—	—	—	—	—	—	—	—	(5,305)	(5,305)	
Other comprehensive loss before reclassification	—	—	—	—	(12,788)	—	—	(12,788)	—	(12,788)	
Amounts reclassified from accumulated other comprehensive loss	—	—	—	—	1,701	—	—	1,701	—	1,701	
Other comprehensive loss, net of tax	—	—	—	—	(11,087)	—	—	(11,087)	—	(11,087)	
Investment in subsidiaries	—	—	—	—	—	—	—	—	185	185	
Stock-based compensation	217	—	(5,632)	—	—	—	—	(5,632)	59	(5,573)	
Balance, March 31, 2023	62,318	62	1,104,519	(212,741)	(37,678)	2,805	(31,174)	822,988	150,049	973,037	
Net loss	— \$	— \$	— \$	(52,604) \$	—	— \$	— \$	(52,604) \$	4,284 \$	(48,320)	
Cash dividends and distributions declared	—	—	—	—	—	—	—	—	(6,497)	(6,497)	
Other comprehensive income before reclassification	—	—	—	—	710	—	—	710	—	710	
Amounts reclassified from accumulated other comprehensive loss	—	—	—	—	3,602	—	—	3,602	—	3,602	
Other comprehensive income, net of tax	—	—	—	—	4,312	—	—	4,312	—	4,312	
Investment in subsidiaries	—	—	—	—	—	—	—	—	8	8	
Stock-based compensation	15	—	3,252	—	—	—	—	3,252	60	3,312	
Balance, June 30, 2023	62,333	62	1,107,771	(265,345)	(33,366)	2,805	(31,174)	777,948	147,904	925,852	
Net income	— \$	— \$	— \$	22,311 \$	—	— \$	— \$	22,311 \$	3,981 \$	26,292	
Cash dividends and distributions declared	—	—	—	—	—	—	—	—	(5,663)	(5,663)	

Other comprehensive income before reclassification	—	—	—	—	14,469	—	—	14,469	—	14,469
Amounts reclassified from accumulated other comprehensive loss	—	—	—	—	10,767	—	—	10,767	—	10,767
Other comprehensive income, net of tax	—	—	—	—	25,236	—	—	25,236	—	25,236
Investment in subsidiaries	—	—	—	—	—	—	—	—	65	65
Stock-based compensation	(15)	—	2,654	—	—	—	—	2,654	60	2,714
Balance, September 30, 2023	62,318	62	1,110,425	(243,034)	(8,130)	2,805	(31,174)	828,149	146,347	974,496

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	Common Stock		Additional			Treasury Stock		Green Plains		Non-	Total
	Shares	Amount	Paid-in		Accumulated Other	Treasury Stock		Stockholders' Equity	Controlling Interests	Stockholders' Equity	
			Capital	Retained Deficit		Shares	Amount				
Balance, December 31, 2022	62,101	\$ 62	1,110,151	\$ (142,417)	\$ (26,591)	2,805	\$ (31,174)	910,031	\$ 151,035	\$ 1,061,066	
Net loss	—	—	—	(70,324)	—	—	—	(70,324)	4,075	(66,249)	
Cash dividends and distributions declared	—	—	—	—	—	—	—	—	(5,305)	(5,305)	
Other comprehensive loss before reclassification	—	—	—	—	(12,788)	—	—	(12,788)	—	(12,788)	
Amounts reclassified from accumulated other comprehensive loss	—	—	—	—	1,701	—	—	1,701	—	1,701	
Other comprehensive loss, net of tax	—	—	—	—	(11,087)	—	—	(11,087)	—	(11,087)	
Investment in subsidiaries	—	—	—	—	—	—	—	—	185	185	
Stock-based compensation	217	—	(5,632)	—	—	—	—	(5,632)	59	(5,573)	
Balance, March 31, 2023	62,318	62	1,104,519	(212,741)	(37,678)	2,805	(31,174)	822,988	150,049	973,037	
Net loss	—	—	—	(52,604)	—	—	—	(52,604)	4,284	(48,320)	
Cash dividends and distributions declared	—	—	—	—	—	—	—	—	(6,497)	(6,497)	
Other comprehensive income before reclassification	—	—	—	—	710	—	—	710	—	710	
Amounts reclassified from accumulated other comprehensive loss	—	—	—	—	3,602	—	—	3,602	—	3,602	
Other comprehensive income, net of tax	—	—	—	—	4,312	—	—	4,312	—	4,312	
Investment in subsidiaries	—	—	—	—	—	—	—	—	8	8	
Stock-based compensation	15	—	3,252	—	—	—	—	3,252	60	3,312	
Balance, June 30, 2023	62,333	\$ 62	1,107,771	\$ (265,345)	\$ (33,366)	2,805	\$ (31,174)	777,948	\$ 147,904	\$ 925,852	

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

	Three Months Ended June 30,		Six Months Ended June 30,		Statements of Operations Classification	Statements of Operations Classification
	Three Months Ended September 30,	Nine Months Ended September 30,	Three Months Ended September 30,	Nine Months Ended September 30,		
2024						

Gains (losses) on cash flow hedges													
Gains (losses) on cash flow hedges													
Gains (losses) on cash flow hedges													
Commodity derivatives													
Commodity derivatives													
Commodity derivatives	\$ —	\$	\$ (1,518)	\$	\$ 3,736	\$	\$ (1,518)		(1)	(1)	\$ 5,146	\$	\$ (917)
Commodity derivatives	(2,298)	(3,218)	(3,218)	(13,021)		(13,021)	(5,454)		(2)		(2)	Commodity derivatives	(13,088) (13,234)
Total gains (losses) on cash flow hedges									(3)		(3)	Total gains (losses) on cash flow hedges	
Total gains (losses) on cash flow hedges	(2,298)	(4,736)	(4,736)	(9,285)		(9,285)	(6,972)		(6,972)		(7,942)	(14,151)	
Income tax benefit	Income tax benefit	550	1,134	1,134	2,232	2,232	1,669	1,669		(4)	(4)	Income tax benefit	1,890 3,384

Amounts reclassified from accumulated other comprehensive loss

- (1) Revenues
- (2) Costs of goods sold
- (3) **Loss** **Income** (**loss**) before income taxes and **income** (**loss**) **income** from equity method investees
- (4) Income tax benefit (**expense**)

## 12.13. 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.

The IRA was signed into law on August 16, 2022. The IRA includes significant law changes relating to tax, climate change, energy and health care. The IRA significantly expands clean energy incentives by providing an estimated

**\$370** **\$370** billion of new energy related tax credits over the next ten years. It also permits more flexibility for taxpayers to use the credits with direct-pay and transferable credit options. In addition, the IRA includes key revenue-raising provisions which include a 15% book-income alternative minimum tax on corporations with adjusted financial statement income over \$1 billion, a 1% excise tax on the value of certain net stock repurchases by publicly traded companies, and the reinstatement of Superfund excise taxes. **The company expects it will benefit from certain energy related tax credits in future years and not be negatively impacted by the revenue raising provisions; however, the company does not have enough information to provide a reasonable estimate of future tax benefits at this time.**

On January 9, 2024, the transactions contemplated by the Merger Agreement were completed as described in more detail in Note 3 - **Acquisition – Merger and Dispositions** included herein. For income tax purposes, the total consideration given by the company in exchange for the remaining interest in the partnership, creates a tax basis in the acquired interest. Because the GAAP basis in the acquired interest is less than the total consideration, a new deferred tax asset was created. The company's valuation allowance on deferred tax assets increased by a corresponding amount, which did not have a material impact on the company's consolidated financial statements.

The company recorded income tax benefit, **including** **income** **tax** **benefit** **from** **equity** **method** **investments**, of **\$0.3** **million** **\$1.5** **million** for the three months ended **June 30, 2024** **September 30, 2024**, compared with income tax benefit of **\$1.0** **million** **\$7.8** **million** for the same period in 2023. The decrease in the amount of tax benefit recorded for the three months ended **June 30, 2024** was primarily due to **an increase** **a decrease** in the valuation allowance recorded against **certain** **deferred** **tax** **assets** **related** **to** **gains** (**losses**) **on** **derivatives** **for** the three months ended **September 30, 2023**.

The effective tax rate can be affected by variances in 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.

Unrecognized tax benefits of approximately \$51.4 million have been recorded as a reduction of the deferred tax assets associated with the federal tax credit carryforwards, which are currently under audit. The appeals hearing related to the research and development ("R&D") tax credits is scheduled for September 2024, are currently under review by the IRS Office of Independent Appeals. The results of the current audit may cause the company to significantly increase or decrease the unrecognized tax benefits associated with R&D tax credits for periods under audit and for periods not under audit, which could impact the company's effective tax rate. At this time, the company does not have enough information to be able to estimate the potential financial statement impact.

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## 14. COMMITMENTS AND CONTINGENCIES

## Leases

The company leases certain facilities, parcels of land, and equipment, with remaining terms ranging from less than one year to approximately 13.4 years. The land and facility leases include renewal options. The renewal options are included in the lease term only for those sites or locations in which they are reasonably certain to be renewed. Equipment renewals are not considered reasonably certain to be exercised as they typically renew with significantly different underlying terms.

The components of lease expense are as follows (in thousands):

	Three Months		Six Months		
	Ended June 30,	Ended June 30,	Ended June 30,	Ended June 30,	
	Three Months		Nine Months		
	Ended September 30,	Ended September 30,	Ended September 30,	Ended September 30,	
	2024	2024	2023	2024	2023
Lease expense					2023
Operating lease expense					2024
Operating lease expense					2023
Operating lease expense	\$7,110	\$6,843	\$14,118	\$13,589	\$7,173
Variable lease expense (benefit)	350	(176)	664	(307)	551
(1)					211
					1,234
					(96)
Total lease expense	Total lease expense	\$7,460	\$6,667	\$14,782	\$13,282
					Total lease expense
					\$7,724
					\$7,366
					\$22,506
					\$20,648

(1) Represents amounts incurred in excess of the minimum payments required for a certain building lease and for the handling and unloading of railcars for a certain land lease, offset by railcar lease abatements provided by the lessor when railcars are out of service during periods of maintenance or upgrade.

Supplemental cash flow information related to operating leases is as follows (in thousands):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2024	2024	2023	2024
			2023	2024
			2023	2024
			2023	2024
Cash paid for amounts included in the measurement of lease liabilities				
Operating cash flows from operating leases				
Operating cash flows from operating leases				
Operating cash flows from operating leases				
Right-of-use assets obtained in exchange for lease obligations				
Right-of-use assets obtained in exchange for lease obligations				

Right-of-use assets obtained in exchange for lease obligations

Operating leases  
Operating leases  
Operating leases

Right-of-use assets and lease obligations derecognized due to lease modifications:

Right-of-use assets and lease obligations derecognized due to lease modifications:

Right-of-use assets and lease obligations derecognized due to lease modifications:

Right-of-use assets <sup>(1)</sup>  
Right-of-use assets <sup>(1)</sup>  
Right-of-use assets <sup>(1)</sup>  
Lease obligations <sup>(1)</sup>

<sup>(1)</sup> Amounts presented in 2024 are related to the Birmingham Transaction, while amounts in 2023 relate to the Atkinson Transaction. Derecognition of right-of-use assets and lease obligations for both dispositions is related to railcar operating leases.

Supplemental balance sheet information related to operating leases is as follows:

		June 30, 2024		December 31, 2023	
		September 30, 2024		December 31, 2023	
Weighted average remaining lease term	Weighted average remaining lease term	4.2 years	4.5 years	Weighted average remaining lease years term	4.1 years 4.5 years
Weighted average discount rate					
Weighted average discount rate					
Weighted average discount rate		5.33 %	5.16 %		5.32 % 5.16 %

Aggregate minimum lease payments under the operating lease agreements for the remainder of 2024 and in future years are as follows (in thousands):

Year Ending December 31,	Amount
2024	\$ 14,404
2025	24,520
2026	17,750
2027	13,590
2028	5,957
Thereafter	9,055
Total	85,276
Less: Present value discount	(9,342)
Lease liabilities	\$ 75,934

The company has two additional railcar operating leases anticipated to commence during the third quarter of 2024, with undiscounted future lease payments of approximately \$5.9 million and lease terms of five years. These amounts are not included in the tables above.

Year Ending December 31,	Amount
2024	\$ 7,211
2025	25,420
2026	18,627
2027	14,356
2028	6,648
Thereafter	9,129
Total	81,391
Less: Present value discount	(8,543)
Lease liabilities	\$ 72,848

#### Other Commitments

As of **June 30, 2024** **September 30, 2024**, the company had contracted future purchases of grain, **ethanol**, distillers grains and natural gas valued at approximately **\$163.3 million** **\$187.8 million** and future commitments for storage and transportation, valued at approximately **\$19.8 million** **\$26.3 million**.

The company has entered into contracts with Tallgrass High Plains Carbon Storage, LLC and its affiliates, related to the construction, development and operation of carbon capture and sequestration projects at our three Nebraska plants, which are expected to be completed in 2025. Payments associated with these contracts are due monthly over a period of twelve years, commencing after the capture facilities are considered in-service. Amounts due under the contracts are based on the achievement of certain project milestones and are subject to termination of all or portions of the contracts. Certain of the future obligations to Tallgrass High Plains Carbon Storage LLC are secured by a leasehold deed of trust, security agreement and assignment of rents and leases.

As of September 30, 2024, the company had incurred \$7.2 million of accumulated construction costs in relation to the projects, presented as property, plant and equipment on the consolidated balance sheet, with an equal and offsetting liability presented as other liabilities.

#### Legal

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. SUBSEQUENT EVENT

On August 2, 2024, the company entered into a definitive agreement to sell the unit train terminal in Birmingham, which assets are reported in the ethanol production segment. The company expects the transaction to close in the third quarter and the proceeds will be used to help repay the outstanding balance of the Green Plains Partners term loan.

### 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, 2023.

#### 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, 2023 or incorporated by reference. Specifically, we may experience fluctuations in future operating results due to a number of economic conditions and other factors, including: the status, expected timing, and expected outcome of our Board of Directors' ongoing review of strategic alternatives; the failure to realize the anticipated results from the new products being developed; the failure to realize the anticipated cost savings or other benefits of the Merger; local, regional and national economic conditions and the impact they may have on the company and its customers; disruption caused by health epidemics, such as the COVID-19 outbreak; conditions in the ethanol and biofuels industry, including a sustained decrease in the level of supply or demand for ethanol and biofuels or a sustained decrease in the price of ethanol or biofuels; competition in the ethanol and biofuels industry and other industries in which we operate; commodity market risks, including those that may result from weather conditions; the financial condition of the company's customers; any non-performance by customers of their contractual obligations; changes in safety, health, environmental and other governmental policy and regulation, including changes to tax laws; risks related to acquisition and disposition activities and achieving anticipated results; risks associated with merchant trading; risks related to our equity method investees; the results of any reviews, investigations or other proceedings by government authorities; the performance of the company; and other factors detailed in reports filed with the SEC.

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 and do not 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 an Iowa corporation, founded in June 2004 as a producer of low-carbon fuels and has grown to be a leading biorefining company maximizing the potential of existing resources through fermentation and patented agribusiness technologies. We continue the transition from a commodity-processing business to a value-added agricultural technology company creating sustainable, high-value ingredients from existing resources. To that end, we are currently executing on a number of initiatives to develop and implement proven agricultural, food and industrial biotechnology systems that allow for product diversification, new market opportunities and production of additional value-added

low-carbon ingredients, such as Ultra-High Protein, glucose and dextrose corn syrups, renewable corn oil and more, as well as offering these technologies to the broader biofuels industry.

Green Plains Partners LP, a master limited partnership, is our primary downstream storage and logistics provider since its assets are the principal method of storing and delivering the ethanol we produce. On January 9, 2024, pursuant to the Merger Agreement, we completed the acquisition of all the publicly held common units of the partnership not already owned by us and our affiliates. As a result of the Merger, the partnership common units are no longer publicly traded.

Refer to Note 3 - **Acquisition – Merger and Dispositions** included in the notes to the consolidated financial statements included herein for more information.

We group our business activities into the following two operating segments to manage performance:

- **Ethanol Production.** Our ethanol production segment includes the production, storage and transportation of ethanol, distillers grains, Ultra-High Protein and renewable corn oil at ten biorefineries in Illinois, Indiana, Iowa, Minnesota, Nebraska and Tennessee. At capacity, our facilities are capable of processing approximately 310 million bushels of corn per year and producing approximately 903 million gallons of ethanol, 2.2 million tons of distillers grains and Ultra-High Protein, and 300 million pounds of renewable corn oil, a low-carbon feedstock for biodiesel and renewable diesel. This segment also includes 24 ethanol storage facilities, **two** **one** fuel terminal **facilities** **facility** and approximately **2,180** **2,200** leased ethanol railcars. We are one of the largest ethanol producers in North America.
- **Agribusiness and Energy Services.** Our agribusiness and energy services segment includes grain procurement, with approximately 20.2 million bushels of grain storage capacity, and our commodity marketing business, which markets, sells and distributes the ethanol, distillers grains, Ultra-High Protein and renewable corn oil produced at our ethanol plants. We also market ethanol for a third-party producer as well as buy and sell ethanol, distillers grains, Ultra-High Protein, renewable corn oil, grain, natural gas and other commodities in various markets.

We have installed and are operating FQT MSC™ technology at five of our biorefineries. Through our value-added ingredients initiative, we produce Ultra-High Protein, a feed ingredient with protein concentrations of 50% or greater and yeast concentrations of 25%, increase production of renewable corn oil and produce other higher value products, such as post-MSC™ distillers grains. We successfully completed full scale 60% protein production runs using FQT's MSC™ system, which is our new specialty feed ingredient branded as Sequence™. In 2021, we formed a 50/50 joint venture with Tharaldson Ethanol Plant I LLC (Tharaldson Ethanol), which owns the MSC™ technology assets added adjacent to the Tharaldson Ethanol plant in Casselton, North Dakota to produce Ultra-High Protein and increase renewable corn oil yields. These assets completed commissioning and shipped the first commercial quantities during the second quarter of 2024. Including GP Turnkey Tharaldson's capacity, the annual Ultra-High Protein capacity we market is approximately 430 thousand tons.

We began pilot scale batch operations at the FQT CST™ production facility at our Innovation Center at York in the second quarter of 2021, which allows for the production of both food and industrial grade low carbon-intensity glucose and dextrose corn syrups to target applications in food production, renewable chemicals and synthetic biology. The world's first commercial scale FQT CST™ facility in Shenandoah, Iowa is **mechanically complete**, and we continue to work through process flow adjustments in the commissioning phase, **now producing**, with shipments expected to begin in the **third** **fourth** quarter of 2024. We also anticipate modifying additional biorefineries to include FQT CST™ production capabilities to meet anticipated future customer demands.

Additionally, we have taken advantage of opportunities to divest certain assets to reallocate capital toward our current growth initiatives. We are focused on generating stable and growing operating margins through our business segments and risk management strategy.

SAF is a drop-in fuel, chemically identical to petroleum-based jet fuel and can be blended into the fuel supply at varying levels. There is an increasing focus on using this fuel to reduce the carbon footprint of air travel. SAF can be produced from vegetable and waste oil feedstocks, such as our renewable corn oil. Additionally, ATJ technologies are emerging and being commercialized that use low-Cl ethanol as a feedstock to produce SAF. In January 2023, Green Plains, United Airlines and Tallgrass formed a joint venture, Blue Blade Energy, to develop and then commercialize ATJ SAF technology.

As part of our carbon reduction strategy, we committed our seven biorefineries in Nebraska, Iowa and Minnesota to carbon capture and sequestration projects through carbon pipeline transport, four with Summit Carbon Solutions and three with Trailblazer CO2 Pipeline LLC, which will lower GHG emissions through the capture of biogenic carbon dioxide at each of these biorefineries, significantly lowering their Cl. We have executed agreements for the future purchase, financing and installation of carbon capture equipment at our three Nebraska plants. We anticipate completion of these Nebraska biorefinery carbon capture projects in the second half of 2025, and Summit Carbon Solutions intends to be operational in the second half of 2026. In addition, we are collaborating with global partners to explore innovative options for carbon use where pipeline transport or direct injection may not be feasible. Reducing the Cl of our fuel ethanol could allow us to benefit from state and federal clean fuel programs, including LCFS and federal tax credits under the IRA, and could position our low-carbon ethanol as a potential feedstock for ATJ pathways to produce SAF.

In July 2023, we announced a technology collaboration with Equilon Enterprises LLC, which allows us to use FQT's precision separation and processing technology with Shell Fiber Conversion Technology. The two technologies will combine fermentation, mechanical separation and processing, and fiber conversion into one platform. This has the potential to create a new process to liberate all available distillers corn oil currently bound in the fiber fraction of the corn kernel, generate cellulosic sugars for production of low-carbon ethanol, and enhance and expand available high protein to produce high-quality ingredients for global animal feed diets. Our collaboration completed the construction of a facility at Green Plains York and began commissioning during 2024.

Our profitability is highly dependent on commodity prices, particularly for ethanol, distillers grains, Ultra-High Protein, renewable corn oil, soybean meal, corn, and natural gas. Since market price fluctuations of these commodities are not always correlated, our operations may be unprofitable at times. We use a variety of risk management tools and hedging

strategies to monitor price risk exposure at our ethanol plants and lock in favorable margins or reduce production when margins are compressed. Our profitability could be significantly impacted by price movements of the aforementioned commodities.

#### Recent Developments

##### Clean Sugar Technology

The Partnership Merger company has achieved successful ongoing production of dextrose syrups with CST™ at its Shenandoah facility. The syrups produced with CST™ have proven successful in trials as feedstocks for fermentation of various bio-products and bio-chemicals, in addition to food ingredients. The company is going through final product approvals with multiple potential offtake partnerships.

##### Birmingham Terminal

On **January 9, 2024** September 30, 2024, the transactions contemplated by company completed the Merger Agreement were completed and the company acquired all sale of the publicly held common units terminal located in Birmingham, Alabama and certain related assets and transfer of liabilities (the "Birmingham Transaction") for a sale price of \$47.5 million, plus working capital of \$1.4 million. The company recorded a pretax gain on the sale of \$30.7 million. The proceeds from the sale were used to repay the outstanding balance of the partnership not already owned by the company and its affiliates. Green Plains Partners term loan due July 20, 2026. Refer to Note 3 - **Acquisition – Merger and Dispositions** in the notes to the consolidated financial statements included herein for more information.

##### Strategic Review

The As previously announced, the company announced initiated a strategic review process in February 2024 to explore a broad range of opportunities to enhance long-term shareholder value, including, but not limited to, acquisitions, divestitures, a merger or sale, partnerships and financings. The Board of Directors continues to progress the strategic review process, and has formed a Special Committee to assist the Board working with the evaluation of various alternatives. In addition, the company has engaged Bank of America as its financial advisor advisors, BMO Capital Markets Corp. and Moelis & Company, and legal advisors Vinson & Elkins LLP as its legal advisor. LLP. There is no deadline or definitive timetable for completion of the strategic review process, and there can be no assurances that the process will result in a transaction or any other outcome. The company does not intend to make any further public comment regarding the review until the Board has approved a specific action or otherwise determines that additional disclosure is appropriate or required.

##### Birmingham Terminal The Partnership Merger

On **August 2, 2024** January 9, 2024, the transactions contemplated by the Merger Agreement were completed and the company entered into a definitive agreement acquired all of the publicly held common units of the partnership not already owned by the company and its affiliates. Refer to sell the unit train terminal in Birmingham, which assets are reported Note 3 – **Merger and Dispositions** in the ethanol production segment. The company expects notes to the transaction to close in the third quarter and the proceeds will be used to help repay the outstanding balance of the Green Plains Partners term loan. consolidated financial statements included herein for more information.

#### Results of Operations

During the **second** **third** quarter of 2024, we maintained an average utilization rate of approximately 92.6% 96.8% of capacity, resulting in ethanol production of 208.5 220.2 mmg, compared with 194.7 223.4 mmg, or 81.5% 93.9% of capacity, for the same quarter last year. Our operating strategy is to transform our company to into a value-add agricultural technology company. Depending on the margin environment, we may exercise operational discretion that results in reductions in production volumes. It is possible that throughput volumes could fluctuate in the future, depending on various factors that drive each biorefinery's variable contribution margin, including future driving and gasoline demand for the industry, demand for valuable coproducts we produce, and the supply and pricing of renewable feedstocks needed to operate our biorefineries. We are currently producing Ultra-High Protein at five of our biorefineries.

##### U.S. Ethanol Supply and Demand

According to the EIA, domestic ethanol production averaged 1.02 million 1.07 million barrels per day during the **second** **third** quarter of 2024, which was 1.0% 3.1% higher than the 1.01 million 1.04 million barrels per day for the same quarter last year. Refiner and blender input volume was 915 914 thousand barrels per day for the **second** **third** quarter of 2024, compared with 905 907 thousand barrels per day for the same quarter last year. Gasoline demand was 2.4% lower 2.7% higher than the prior year at 8.9 million 9.0 million barrels per day during the **second** **third** quarter of 2024. U.S. domestic ethanol ending stocks increased by approximately 1.3 million 1.6 million barrels compared to the prior year, or 5.8% 7.2%, to 23.6 million 23.5 million barrels as of **June 30, 2024** September 30, 2024. As of this filing, according to Prime the Pump, there were approximately 3,244 3,571 retail stations selling E15 year-round.

##### Global Ethanol Supply and Demand

According to the USDA Foreign Agriculture Service, domestic ethanol exports through **May 31, 2024** August 31, 2024, were approximately 817 1,240 mmg, up from the 573 921 mmg for the same period of 2023. Canada was the largest export destination for U.S. ethanol accounting for approximately 34% 35% of domestic ethanol export volume, driven in part by their national clean fuel standard. The United Kingdom, India, Colombia, and India the Netherlands accounted for approximately 12% 13%, 10%, 7% and 11% 6%, respectively, of U.S. ethanol exports. We currently estimate that net ethanol exports will range from 1.6 1.7 to 1.8 billion 1.9 billion gallons in 2024, based on historical demand from a

variety of countries and certain countries that seek to improve their air quality, reduce GHG emissions through low-carbon fuel programs and eliminate MTBE from their own fuel supplies. Fluctuations in currencies relative to the U.S. dollar could impact the U.S. ethanol competitiveness in the global market.

#### Protein and Vegetable Oil Supply and Demand

Our dried distillers grains and high protein ingredients compete against other ethanol producers domestically and abroad, as well as with soybean meal, canola meal and other protein feed ingredients. Likewise, our distillers corn oil, which is a feedstock for producing biodiesel, renewable diesel and to some extent SAF, competes against other vegetable oils such as soybean oil, canola oil, and to some extent palm oil, as well as against waste oils such as used cooking oils, animal fats and tallow. Soybean processing capacity in the U.S. has been expanding to meet the rising demand for vegetable oils to produce renewable fuels. According to the National Oilseed Processors Association, for the **second** **third** quarter of 2024, soybean crush was approximately **525 million** **518 million** bushels, up **9 million** **18 million** bushels from the **516 million** **500 million** bushels crushed during the **second** **third** quarter of 2023. Soybean oil stocks as of September 30, 2024, were **1.6 billion** **1.1 billion** pounds, which was down from the **1.7 billion** pounds of consistent with stocks as of **June 30, 2023**, the prior year. Soybean meal production was **12.4 million** **12.2 million** short tons for the **second** **third** quarter of 2024, up **slightly** from the **12.3 million** **11.8 million** short tons from the same period in the prior year.

#### Legislation and Regulation

We are sensitive to government programs and policies that affect the supply and demand for ethanol and other fuels, which in turn may impact the volume of ethanol and other products we handle. Over the years, various bills and amendments have been proposed in the House and Senate, which would eliminate the RFS entirely, eliminate the **corn-based** **corn-based** ethanol portion of the mandate, lower the price of RINs and make it more difficult to sell fuel blends with higher levels of ethanol. Bills have also been introduced to require or otherwise incentivize higher levels of octane blending, allow for year-round sales of higher blends of ethanol and require car manufacturers to produce vehicles that can operate on higher ethanol blends. We believe it is unlikely that any of these bills will become law in the current Congress. In addition, the manner in which the EPA administers the RFS and related regulations can have a significant impact on the actual amount of ethanol and other biofuels blended into the domestic fuel supply.

Federal mandates and state-level clean fuel standards supporting the use of renewable fuels are a significant driver of ethanol demand in the U.S. Ethanol policies are influenced by concerns for the environment, diversifying the fuel supply, supporting U.S. farmers and reducing the country's dependence on foreign oil. Consumer acceptance of FFVs, availability of higher ethanol blends and increased use of higher ethanol blends in non-FFVs may be necessary before ethanol can achieve further growth in the U.S. light duty surface transportation fleet market share. In addition, expansion of clean fuel standards in other states and countries, or a national LCFS could increase the demand for ethanol, depending on how they are structured. Incentives for automakers to produce FFVs phased out in 2020, and the EPA's proposed Corporate Average Fuel Economy (CAFE) standards further incentivize EV production, with the current administration's stated goal of having EVs represent two-thirds of vehicles sold by 2032. Sales of EVs in the U.S. were approximately **330** **346** thousand vehicles during the **second** **third** quarter of 2024, which represented approximately **8%** of new vehicles sales, up **an 11%** year over year, year increase. During the third quarter ended September 30, 2024, EV market share reached **8.9%**, the highest on record. Transition of the light duty surface transportation fleet from internal combustion engines to EVs could decrease the demand for ethanol.

The IRA, which was signed into law on August 16, 2022, is a sweeping policy that could have many potential impacts on our business which we are continuing to evaluate. The legislation (1) created a new Clean Fuel Production Credit, section 45Z of the Internal Revenue Code, of \$0.02 per gallon per CI point reduction for any fuel below a 50 CI threshold from 2025 to 2027, **section 45Z of the Internal Revenue Code**, which could impact our fuel ethanol, depending on the level of GHG reduction for each gallon; (2) created a new tax credit for SAF, section 40B of the Internal Revenue Code, of \$1.25 to \$1.75 per gallon for 2023 and 2024, depending on the GHG reduction for each gallon, that could possibly involve some of our renewable corn oil or low carbon ethanol as feedstock through an ATJ pathway, depending on the life cycle analysis model being used (this credit expires after 2024 and shifts to the 45Z Clean Fuel Production Credit, where it qualifies for up to \$0.035 per gallon per CI point reduction below a 50 CI threshold); (3) expanded the carbon capture and sequestration credit, section 45Q of the Internal Revenue Code, to \$85 for each metric ton of carbon dioxide sequestered, which could impact our carbon capture strategies,

though it cannot be claimed in conjunction with the 45Z Clean Fuel Production Credit, which could prove to be more valuable; (4) extended the \$1.00 per gallon biomass-based diesel tax credit through 2024, which could impact our renewable corn oil values, as this co-product serves as a low-carbon feedstock for renewable diesel and **bio-diesel** **biodiesel** production (this credit expires after 2024 and shifts to the 45Z Clean Fuel Production credit, where all non-SAF fuels qualify for \$0.02 per gallon for each point of CI reduction under the 50 CI threshold); (5) funded \$500 million of biofuel blending infrastructure, which could impact the availability of higher level ethanol blended fuel; (6) increased funding for climate-smart agriculture and working lands conservation programs for farmers by \$20 billion; and (7) provided credits for the production and purchase of EVs, which could impact the amount of internal combustion engines built and sold longer term, and by extension impact the demand for liquid fuels including ethanol. There are numerous additional clean energy credits included in this law, including investment tax credits for construction of clean energy infrastructure, that could impact us and our overall competitiveness. Regulatory rulemaking for the administration of these programs is underway, and the final regulations could impact many aspects of our business. On April 30, 2024, the U.S. Department of Treasury issued regulatory guidance along with an updated GREET lifecycle assessment model for the 40B SAF tax credit, which included a pathway for U.S. corn ethanol to qualify as a feedstock for SAF if the carbon intensity is lowered through utilization of various technologies and practices, including carbon capture and climate smart agriculture practices. On June 22, 2024, the USDA put out a Request for Information on the Production of Biofuel Feedstocks using climate smart practices, which could inform rulemaking for the 45Z Clean Fuel Production Credit. As of this filing, proposed regulations for 45Z had yet to be issued, despite its effective date of January 1, 2025.

The RFS sets a floor for biofuels use in the United States. In June 2023, the EPA finalized RVOs for 2023, 2024 and 2025, setting the implied conventional ethanol levels at 15.25 billion gallons for 2023, and 15 billion for 2024 and 2025, inclusive of 250 million gallons of supplemental volume in 2023 to reflect a court-ordered remand of a previously lowered RVO. The EPA also proposed a modest increase in biomass-based diesel volumes over the three years, setting the volumes at 2.82 billion for 2023, 3.04 billion for 2024 and 3.35 billion for 2025. The EPA also indicated that corn kernel fiber would contribute to the finalized cellulosic volumes and could move to approve registrations that have been languishing for years at the agency. The EPA also removed a proposed e-RIN program to support EVs from the final rule, but indicated they may move forward with it in a separate rulemaking. The EPA is required to propose RVOs for 2026 and potentially additional years by November of 2024. From time to time, the EPA has delayed the proposed RVOs past

the statutory deadlines, and on July 8, 2024, the administration indicated that it intends to propose RVOs for 2026 and potentially additional years in March 2025, and finalize them in December 2025.

Under the RFS, RINs impact supply and demand. The EPA assigns individual refiners, blenders, and importers the volume of renewable fuels they are obligated to use in each annual RVO based on their percentage of total production of domestic transportation fuel sales. Obligated parties use RINs to show compliance with the RFS mandated volumes. Ethanol producers assign RINs to each gallon of renewable fuel they produce and the RINs are detached when the renewable fuel is blended with transportation fuel domestically. Market participants can trade the detached RINs in the open market. The market price of detached RINs can affect the price of ethanol in certain markets and can influence purchasing decisions by obligated parties. SREs can reduce or waive entirely the obligation for a refinery, which has the practical effect of reducing the RVO, and by extension the amount of RINs that need to be retired, which can impact their values and ultimately blending levels of renewable fuels. There are multiple on-going legal challenges to how the EPA has handled SREs and RFS rulemakings. On October 21, 2024, the U.S. Supreme Court agreed to review the various Circuit Court rulings on SREs to determine the proper venue.

The One-Pound Waiver, which was extended in May 2019 to allow E15 to be sold year-round to all vehicles model year 2001 and newer, was challenged in an action filed in Federal District Court for the D.C. Circuit. On July 2, 2021, the Circuit Court vacated the EPA's rule so the future of summertime, defined as June 1 to September 15, sales of E15 is uncertain. The Supreme Court subsequently declined to hear a challenge to this ruling. In 2022, the EPA issued emergency waivers to allow for the continued sale of E15 during the summer months and similar summertime waivers have been issued each year since then, with the 2024 driving season marking the sixth consecutive year that E15 is able to be sold year-round nationwide, with the exception of California which has not approved the fuel. The EPA has also allowed for the elimination of the One-Pound Waiver for E10 in several Midwestern states beginning with the 2025 summer driving season, which would have the practical effect of allowing for E15 to be sold year-round in the following states: Illinois, Iowa, Minnesota, Missouri, Nebraska, Ohio, South Dakota and Wisconsin.

In October 2019, the White House directed the USDA and EPA to move forward with rulemaking to expand access to higher blends of biofuels. This includes funding for infrastructure, labeling changes and allowing E15 to be sold through E10 infrastructure. The USDA rolled out the Higher Blend Infrastructure Incentive Program in the summer of 2020, providing competitive grants to fuel terminals and retailers for installing equipment for dispensing higher blends of ethanol and biodiesel. In December 2021, the USDA announced it would administer another infrastructure grant program. The IRA, signed into law in 2022, provided for an additional \$500 million in USDA grants for biofuel infrastructure. On June

26, 2023, June 26, 2023, the USDA announced the initial \$50 million in awards, and laid out a process for distributing the remaining \$450 million, with \$90 million being made available each quarter.

To respond to COVID-19 health crisis and attempt to offset the subsequent economic damage, Congress passed multiple relief measures, most notably the CARES Act in March 2020, which created and funded multiple programs that have impacted our industry. The CARES Act also allowed for certain net operating loss carrybacks, which has allowed us to receive certain tax refunds. In December 2020, Congress passed and the then President signed into law an annual spending package coupled with another COVID relief bill, which included additional funds for the Secretary of Agriculture to distribute to those impacted by the pandemic. The language of the bill specifically included biofuels producers as eligible for some of this aid, and in May 2022, the USDA distributed funds to us in the amount of \$27.7 million pursuant to this bill. In July 2023, the USDA distributed supplemental program funds to us in the amount of \$3.4 million.

A string of recent U.S. Supreme Court decisions, namely *Loper Bright Enterprises v. Raimondo*, *SEC v. Jarkesy and Corner Post, Inc. v. Board of Governors of the Federal Reserve*, have the potential to redefine the power of federal agencies, as well as overturn the important principle of administrative law called "Chevron deference," based on a landmark case, *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.* The Chevron deference was a doctrine of judicial deference to administrative interpretations. The general shift in power from agencies to the judicial system resulting from these decisions could impact various regulatory rules affecting our business in ways that could affect our business, prospects and operations, and our financial performance positively or negatively.

#### *Environmental and Other Regulation*

Our operations are subject to environmental regulations, including those that govern the handling and release of ethanol, crude oil and other liquid hydrocarbon materials. Compliance with existing and anticipated environmental laws and regulations may increase our overall cost of doing business, including capital costs to construct, maintain, operate, and upgrade equipment and facilities. Our business may also be impacted by government policies, such as tariffs, duties, subsidies, import and export restrictions and outright embargos. We employ maintenance and operations personnel at each of our facilities, which are regulated by the Occupational Safety and Health Administration.

#### *Comparability*

There are various events that could affect comparability of our operating results, including fluctuations in our production rates in 2024 compared to 2023, along with the disposition of our terminal in Birmingham, Alabama, on September 30, 2024, the disposition of our Atkinson, Nebraska ethanol plant in September 2023 and losses associated with an extended shut down in spring of 2023 at a facility.

#### *Segment Results*

We report the financial and operating performance for the following two operating segments: (1) ethanol production, which includes the production, storage, and transportation of ethanol, distillers grains, Ultra-High Protein and renewable corn oil and (2) agribusiness and energy services, which includes grain handling and storage, commodity marketing and merchant trading for company-produced and third-party ethanol, distillers grains, renewable corn oil, natural gas and other commodities.

As a result of the Merger, the partnership's operations are included in the ethanol production operating segment. The following changes were made to the company's operating segments:

- The revenue and operating results from fuel storage and transportation services previously disclosed within the partnership segment are now included within the ethanol production segment.

- Intersegment activities between the partnership and Green Plains Trade associated with ethanol storage and transportation services previously treated like third-party transactions and eliminated on a consolidated level are now eliminated within the ethanol production segment.

Intersegment activities between the partnership and Green Plains Trade associated with terminal services transacted with the agribusiness and energy services segment will continue to be eliminated on a consolidated level.

Corporate activities include gain on sale of assets and 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, Ultra-High Protein, and renewable corn oil of our ethanol production 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.

When we evaluate segment performance, we review the following segment information as well as earnings before interest expense, income taxes, depreciation and amortization, or EBITDA, and adjusted EBITDA.

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

	Three Months Ended June 30,			%	Six Months Ended June 30,				
	Three Months Ended September 30,				Variance	Nine Months Ended September 30,			
	2024					Variance			
Revenues									
Revenues									
Revenues									
Ethanol production									
Ethanol production									
Ethanol production									
Revenues from external customers	\$524,264	\$	\$727,802	(28.0)%	(28.0)%	\$1,028,710	\$	\$1,424,415	
Intersegment revenues	1,179	1,133	1,133	4.1	4.1	2,392	2,238	2,238	
Total segment revenues	525,443	728,935	728,935	(27.9)	(27.9)	1,031,102	1,426,653	1,426,653	
Agribusiness and energy services									
Revenues from external customers									
Revenues from external customers									
Revenues from external customers	94,561	129,830	129,830	(27.2)	(27.2)	187,329	266,166	266,166	
Intersegment revenues	6,388	5,993	5,993	6.6	6.6	12,616	12,043	12,043	
Total segment revenues	100,949	135,823	135,823	(25.7)	(25.7)	199,945	278,209	278,209	

Revenues including intersegment activity	Revenues including intersegment activity	626,392	864,758	864,758	(27.6)	(27.6)	1,231,047	1,704,862	1,704,862
Intersegment eliminations	Intersegment eliminations	(7,567)	(7,126)	(7,126)	6.2	6.2	(15,008)	(14,281)	(14,281)
		\$618,825	\$	\$857,632	(27.8)%	(27.8)%	\$1,216,039	\$	\$

Three Months Ended

June 30,

Three Months Ended

September 30,

% Variance

Six Months Ended

June 30,

Nine Months Ended

September 30,

% Variance

2024

Cost of goods sold

Cost of goods sold

Cost of goods sold

Ethanol production <sup>(1)</sup>Ethanol production <sup>(1)</sup>Ethanol production <sup>(1)</sup>

\$495,053 \$ \$719,878 (31.2)% (31.2)% \$1,003,355 \$ \$1,426,011 (29.6)

Agribusiness and energy services

93,516 129,409 129,409 (27.7) (27.7) 181,502 262,689 262,689

Intersegment eliminations

(7,567) (7,126) (7,126) 6.2 6.2 (15,008) (14,281) (14,281)

\$ \$ \$842,161 (31.0)% (31.0)% \$1,169,849 \$ \$1,674,4

Three Months

Ended

June 30,

Six Months Ended

June 30,

2024

Gross margin

Gross margin

Gross margin

Ethanol production <sup>(1)</sup>Ethanol production <sup>(1)</sup>Ethanol production <sup>(1)</sup>

\$30,390 \$ 9,057 235.5% \$27,747 \$ 642 \*

Ethanol production <sup>(1) (3)</sup>Ethanol production <sup>(1) (3)</sup>Ethanol production <sup>(1) (3)</sup>

\$66,313 \$58,973 12.4% \$94,060 \$59,615 57.8%

Agribusiness and energy services

7,433 6,414 6,414 15.9 15.9 18,443 15,520 15,520

\$ \$ \$15,471 144.5% 144.5% \$46,190 \$ \$16,162 185.8% 185

Three Months

Ended

June 30,

Six Months Ended

June 30,

Three Months

Ended

September 30,

% Variance

Nine Months Ended

September 30,

% Variance



(1) Costs historically reported as operations and maintenance expenses in the consolidated statements of operations are now being reported within cost of goods sold, resulting in increased cost of goods sold and decreased gross margin within the ethanol production segment.

(2) **Operating loss** Depreciation and amortization for ethanol corporate activities includes impairment of a research and development technology intangible asset of \$3.5 million for the three and nine months ended September 30, 2024.

(3) Ethanol production includes an inventory lower of average cost or net realizable value adjustment of \$9.5 million \$10.1 million and \$1.7 million for the three and six nine months ended June 30, 2023, September 30, 2024 and 2023, respectively.

(4) Corporate activities includes a \$30.7 million and \$5.7 million pretax gain on sale of assets for the three and nine months ended September 30, 2024 and 2023, respectively.

\* Percentage variances not considered meaningful.

We use EBITDA, adjusted EBITDA, and segment EBITDA as measures of profitability to compare the financial performance of our reportable segments and manage those segments. EBITDA is defined as earnings before interest expense, income taxes, including related income taxes of equity method investments, depreciation and amortization excluding the amortization of right-of-use assets and debt issuance costs. Adjusted EBITDA includes adjustments related to other income associated with the USDA COVID-19 relief grant, gain on asset dispositions, and our proportional share of EBITDA adjustments of our equity method investees. We believe EBITDA, adjusted EBITDA and segment EBITDA are useful measures to compare our performance against other companies. These measures should not be considered an alternative to, or more meaningful than, net income, which is prepared in accordance with GAAP. EBITDA, adjusted EBITDA, and segment EBITDA calculations may vary from company to company. Accordingly, our computation of EBITDA, adjusted EBITDA, and segment EBITDA may not be comparable with a similarly titled measure of other companies.

The following table reconciles net loss income (loss) including noncontrolling interest to adjusted EBITDA (in thousands):

Three Months Ended June 30,	%	Six Months Ended June 30,	%
		Variance	

		Three Months Ended September 30,				% Variance				Nine Months Ended September 30,				% Variance		
		2024														
Net loss																
Net loss																
Net loss		\$ (24,038)		\$ (48,320)		50.3%		\$ (75,160)		\$ (114,569)		34.4%				
Net income (loss)																
Net income (loss)																
Net income (loss)		\$ 48,637		\$ 26,292		85.0%		\$ (26,523)		\$ (88,277)		(70.0)%				
Interest expense	Interest expense	7,494	9,741	9,741	(23.1)		(23.1)		15,280	19,479		19,479		(21.6)		
Income tax (benefit) expense		(273)		(1,019)		(73.2)		56		2,410		(97.7)				
Income tax benefit, net of equity method income taxes		(1,478)		(7,763)		(81.0)		(1,422)		(5,353)		(73.4)				
Depreciation and amortization	Depreciation and amortization	21,584	24,626	24,626	(12.4)		(12.4)		43,071	50,012		50,012		(13.9)		
(1)	EBITDA	EBITDA	4,767	(14,972)	(14,972)	131.8		131.8		(16,753)	(42,668)		(42,668)		60.7	
Other income (2)		—		(3,440)		*		—		(3,440)		*				
Gain on sale of assets		(30,723)		(5,651)		*		(30,723)		(5,651)		*				
Proportional share of EBITDA adjustments to equity method investees	Proportional share of EBITDA adjustments to equity method investees	271	45	45	*		*		316	90		90		251.1		
Adjusted EBITDA	Adjusted EBITDA	\$ 5,038	\$ 133.8%	\$ (14,927)	133.8%		133.8%		\$ (16,437)	\$ (42,578)		61.4%		61.4%		

(1) Excludes amortization of operating lease right-of-use assets and amortization of debt issuance costs.

(2) Other income includes a grant received from the USDA related to the Biofuel Producer Program of \$3.4 million for the three and nine months ended September 30, 2023.

The following table reconciles segment EBITDA to consolidated adjusted EBITDA (in thousands):

		Three Months Ended June 30,				Six Months Ended June 30,				Nine Months Ended September 30,					
		2024													
Adjusted EBITDA															
Adjusted EBITDA															
Adjusted EBITDA															
Ethanol production (1)															
Ethanol production (1)															
Ethanol production (1)		\$ 17,952	\$ (1,141)	*	*		*		\$ 4,331	\$ (18,945)		122.9%			
Agribusiness and energy services	Agribusiness and energy services	3,045	2,871	2,871	6.1		6.1		10,101	8,098		8,098			

Corporate activities	Corporate activities	(16,230)	(16,702)	(16,702)	2.8	2.8	(31,185)	(31,821)	(31,821)
EBITDA	EBITDA	4,767	(14,972)	(14,972)	131.8	131.8	(16,753)	(42,668)	(42,668)
Other income <sup>(2)</sup>	—	—	(3,440)	—	—	—	—	(3,440)	—
Gain on sale of assets	Gain on sale of assets	(30,723)	(5,651)	—	—	(30,723)	(5,651)	—	—
Proportional share of EBITDA adjustments to equity method investees	Proportional share of EBITDA adjustments to equity method investees	271	45	45	*	*	316	90	90
	\$	\$ 5,038	\$ (14,927)	133.8%	133.8%	\$ (16,437)	\$ 90	\$ (42,578)	\$ (42,578)

(1) Ethanol production includes an inventory lower of average cost or net realizable value adjustment of \$9.5 million \$10.1 million and \$1.7 million for the three and ~~six~~ nine months ended ~~June 30, 2023~~ September 30, 2024 and 2023, respectively.

(2) Other income includes a grant received from the USDA related to the Biofuel Producer Program of \$3.4 million for the three and nine months ended September 30, 2023.

\* Percentage variances not considered meaningful.

#### Three Months Ended ~~June 30, 2024~~ September 30, 2024 Compared with the Three Months Ended ~~June 30, 2023~~ September 30, 2023

##### Consolidated Results

Consolidated revenues decreased \$238.8 million \$234.0 million for the three months ended ~~June 30, 2024~~ September 30, 2024 compared with the same period in 2023 primarily due to lower weighted average selling prices on ethanol, distillers grains and renewable corn oil, as well as lower volumes sold on ethanol and distillers grains within our ethanol production segment as described below. Revenues were also lower within our agribusiness and energy services segment primarily due to lower weighted average ethanol trading prices.

Net income increased \$22.3 million for the three months ended September 30, 2024 compared with the same period last year primarily due to a gain on the sale of assets from the Birmingham Transaction and higher margins in our ethanol production segment. Adjusted EBITDA increased \$10.4 million primarily due to higher margins in our ethanol production segment. Interest expense was \$10.1 million for three months ended September 30, 2024 compared to \$9.6 million for the same period in 2023 due to higher loan fees in connection with the repayment of the Green Plains Partners term loan. Income tax benefit, including income tax benefit from equity method investees, was \$1.5 million for the three months ended September 30, 2024 compared with income tax benefit of \$7.8 million for the same period in 2023 primarily due to a decrease in the valuation allowance recorded against certain deferred tax assets for the three months ended September 30, 2023.

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

##### Ethanol Production Segment

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

	Three Months Ended September 30,		
	2024	2023	% Variance
Ethanol (thousands of gallons)	220,299	223,469	(1.4)%
Distillers grains (thousands of equivalent dried tons)	489	514	(4.9)
Ultra-High Protein (thousands of tons)	69	61	13.1
Renewable corn oil (thousands of pounds)	77,074	74,227	3.8
Corn consumed (thousands of bushels)	75,140	76,544	(1.8)

Revenues in our ethanol production segment decreased \$210.9 million for the three months ended September 30, 2024 compared with the same period in 2023, primarily due to lower weighted average selling prices on ethanol, distillers grains and renewable corn oil resulting in decreased revenues of \$174.5 million, \$27.6 million and \$15.9 million, respectively, in addition to lower ethanol and distillers grain volumes sold resulting in decreased revenues of \$8.6 million and \$3.1 million, respectively. Revenues also increased as a result of hedging activities by \$16.2 million.

Cost of goods sold in our ethanol production segment decreased \$218.2 million for the three months ended September 30, 2024 compared with the same period last year primarily due to lower weighted average corn prices, ethanol volumes purchased and input costs related to natural gas of \$123.3 million, \$69.6 million and \$23.9 million, respectively. Costs also decreased as a result of hedging activities of \$9.1 million.

Operating income in our ethanol production segment increased \$11.3 million for the three months ended September 30, 2024 compared with the same period in 2023 primarily due to increased margins as outlined above. Depreciation and amortization expense for the ethanol production segment was \$21.4 million for the three months ended September 30, 2024, compared with \$22.6 million for the same period last year.

#### Agribusiness and Energy Services Segment

Revenues in our agribusiness and energy services segment decreased \$23.2 million while operating income decreased \$3.5 million for the three months ended September 30, 2024 compared with the same period in 2023. The decrease in revenues was primarily due to lower weighted average ethanol trading prices.

#### Intersegment Eliminations

Intersegment eliminations of revenues were consistent for the three months ended September 30, 2024 compared with the same period in 2023.

#### Corporate Activities

Operating income related to corporate activities for the three months ended September 30, 2024 was primarily impacted by an increase in gain on sale of assets and a decrease in personnel costs compared to the same period in 2023.

### Nine Months Ended September 30, 2024 Compared with the Nine Months Ended September 30, 2023

#### Consolidated Results

Consolidated revenues decreased \$708.6 million for the nine months ended September 30, 2024 compared with the same period in 2023 primarily due to lower weighted average selling prices on ethanol, distillers grains and renewable corn oil, partially offset by higher volumes sold on ethanol and distillers grains and renewable corn oil within our ethanol production segment as described below. Revenues were also lower within our agribusiness and energy services segment as a result of decreased primarily due to lower weighted average ethanol and distillers grains natural gas trading volumes, prices.

Net loss decreased \$24.3 million \$61.8 million for the nine months ended September 30, 2024 compared with the same period last year primarily due to higher margins in our ethanol production segment, a gain on the sale of assets from the Birmingham Transaction and adjusted decreased depreciation expense. Adjusted EBITDA increased \$20.0 million \$36.5 million for the three nine months ended June 30, 2024 September 30, 2024 compared with the same period last year primarily due to higher margins in our ethanol production segment. Interest expense decreased \$3.7 million for the three nine months ended June 30, 2024 September 30, 2024 compared with the same period in 2023 primarily due to lower working capital revolver balances. Income tax benefit, including income tax benefit from equity method investees, was \$0.3 million \$1.4 million for the three nine months ended June 30, 2024 September 30, 2024, compared with income tax benefit of \$1.0 million \$5.4 million for the same period in 2023 primarily due to an increase a decrease in the valuation allowance recorded against certain deferred tax assets for the three nine months ended June 30, 2024 September 30, 2023.

The following discussion provides greater detail about our second quarter year-to-date segment performance.

#### Ethanol Production Segment

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

		Three Months Ended			Nine Months Ended					
		June 30,			September 30,					
		2024			2023			2023		
		2024	2023	% Variance						
Ethanol (thousands of gallons)										
Ethanol (thousands of gallons)		208,483	194,753	194,753	7.0%	7.0%	636,686	625,102	625,102	1.9% 1.9%
Distillers grains (thousands of equivalent dried tons)	Distillers grains (thousands of equivalent dried tons)	463	458	458	1.1	1.1	Distillers grains (thousands of equivalent dried tons)	1,421	1,454	1,454 (2.3) (2.3)
Ultra-High Protein (thousands of tons)	Ultra-High Protein (thousands of tons)	65	44	44	47.7	47.7	Ultra-High Protein (thousands of tons)	194	157	157 23.6 23.6
Renewable corn oil (thousands of pounds)	Renewable corn oil (thousands of pounds)	73,630	64,689	64,689	13.8	13.8	Renewable corn oil (thousands of pounds)	217,425	206,927	206,927 5.1 5.1

Corn consumed (thousands of bushels)	Corn consumed (thousands of bushels)	71,819	67,336	67,336	6.7	6.7	Corn consumed (thousands of bushels)	218,233	215,115	215,115	1.4	1.4
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Revenues in our ethanol production segment decreased \$203.5 million \$606.4 million for the three nine months ended June 30, 2024 September 30, 2024 compared with the same period in 2023, primarily due to lower weighted average selling prices on ethanol, distillers grains, and renewable corn oil resulting in decreased revenues of \$203.7 million \$532.3 million, \$38.4 million \$97.1 million, and \$9.5 million \$35.2 million, respectively.

partially offset by higher ethanol distillers grain and renewable corn oil volumes sold resulting in increased revenues of \$38.9 million, \$6.3 million \$30.8 million and \$5.2 million \$6.7 million, respectively. Revenues also decreased increased as a result of hedging activities by \$1.8 million \$19.2 million.

Cost of goods sold in our ethanol production segment decreased \$224.8 million \$640.9 million for the three nine months ended June 30, 2024 September 30, 2024 compared with the same period last year primarily due to lower weighted average corn prices, ethanol volumes purchased and utilities, chemicals lower input costs related to natural gas resulting in decreased costs of \$467.4 million, \$145.1 million and other costs including losses associated with an extended plant shutdown in 2023, of \$172.4 million, \$46.1 million and \$34.6 million \$78.0 million, respectively, partially offset by higher corn volumes processed resulting in increased corn costs of \$31.4 million \$20.6 million. Costs also decreased as a result of hedging activities of \$3.3 million.

Operating loss in our ethanol production segment decreased \$22.9 million \$42.5 million for the three nine months ended June 30, 2024 September 30, 2024 compared with the same period in 2023 primarily due to increased margins as outlined above. Depreciation and amortization expense for the ethanol production segment was \$20.5 million \$62.5 million for the three nine months ended June 30, 2024 September 30, 2024, compared with \$23.3 million for the same period last year.

#### Agribusiness and Energy Services Segment

Revenues in our agribusiness and energy services segment decreased \$34.9 million while operating income remained consistent for the three months ended June 30, 2024 compared with the same period in 2023. The decrease in revenues was primarily due to a decrease in ethanol and distillers grains trading prices, partially offset by an increase in natural gas trading volumes.

#### Intersegment Eliminations

Intersegment eliminations of revenues was relatively consistent for the three months ended June 30, 2024 compared with the same period in 2023.

#### Corporate Activities

Operating income was impacted by a decrease in corporate activities of \$1.9 million for the three months ended June 30, 2024 compared to the same period in 2023, primarily due to decreased personnel costs during the three months ended June 30, 2024.

#### Six Months Ended June 30, 2024 Compared with the Six Months Ended June 30, 2023

##### Consolidated Results

Consolidated revenues decreased \$474.5 million for the six months ended June 30, 2024 compared with the same period in 2023 primarily due to lower weighted average selling prices on ethanol, distillers grains and renewable corn oil, partially offset by higher volumes sold on ethanol, distillers grains (including Ultra-High Protein) and renewable corn oil within our ethanol production segment as described below. Revenues were also lower within our agribusiness and energy services segment as a result of decreased trading volumes.

Net loss decreased \$39.4 million for the six months ended June 30, 2024 compared with the same period last year primarily due to higher margins in our ethanol production segment, higher trading margins in our agribusiness and energy services segment and decreased depreciation expense. Adjusted EBITDA increased \$26.1 million for the six months ended June 30, 2024 compared with the same period last year primarily due to higher margins in our ethanol production segment. Interest expense decreased \$4.2 million for the six months ended June 30, 2024 compared with the same period in 2023 primarily due to lower working capital revolver balances. Income tax expense was \$0.1 million for the six months ended June 30, 2024, compared with income tax expense of \$2.4 million for the same period in 2023 primarily due to a decrease in the valuation allowance recorded against certain deferred tax assets for the six months ended June 30, 2024.

The following discussion provides greater detail about our year-to-date segment performance.

#### Ethanol Production Segment

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

	Six Months Ended June 30,		
	2024	2023	% Variance

Ethanol (thousands of gallons)	416,387	401,633	3.7%
Distillers grains (thousands of equivalent dried tons)	932	940	(0.9)
Ultra-High Protein (thousands of tons)	125	96	30.2
Renewable corn oil (thousands of pounds)	140,351	132,700	5.8
Corn consumed (thousands of bushels)	143,093	138,571	3.3

Revenues in our ethanol production segment decreased \$395.6 million for the six months ended June 30, 2024 compared with the same period in 2023, primarily due to lower weighted average selling prices on ethanol, distillers grains, and renewable corn oil resulting in decreased revenues of \$357.3 million, \$70.7 million, and \$19.2 million, respectively, partially offset by higher ethanol, distillers grains (including Ultra-High Protein), and renewable corn oil volumes sold resulting in increased revenues of \$38.8 million, \$5.1 million and \$4.7 million, respectively. Revenues also increased as a result of hedging activities by \$3.0 million.

Cost of goods sold in our ethanol production segment decreased \$422.7 million for the six months ended June 30, 2024 compared with the same period last year primarily due to lower weighted average corn prices resulting in \$346.9 million in decreased costs, lower ethanol volumes purchased of \$75.4 million, lower utilities costs of \$52.7 million and lower freight costs of \$6.8 million, partially offset by higher corn volumes processed resulting in increased corn costs of \$31.7 million and hedging activities of \$8.1 million.

Operating loss decreased \$31.2 million for the six months ended June 30, 2024 compared with the same period in 2023 primarily due to increased margins in ethanol production as outlined above. Depreciation and amortization expense for the ethanol production segment was \$41.1 million for the six months ended June 30, 2024, compared with \$47.0 million \$69.6 million for the same period last year, with the decrease primarily due to certain assets becoming fully depreciated.

#### Agribusiness and Energy Services Segment

Revenues in our agribusiness and energy services segment decreased \$78.3 million \$101.5 million while operating income increased \$1.9 million decreased \$1.6 million for the six nine months ended June 30, 2024 September 30, 2024 compared with the same period in 2023. The decrease in revenues was primarily due to a decrease in lower weighted average ethanol and natural gas and distillers grains trading prices. Operating income increased primarily as a result of higher grain storage volumes.

#### Intersegment Eliminations

Intersegment eliminations of revenues increased by \$0.7 million for the six nine months ended June 30, 2024 September 30, 2024 compared with the same period in 2023 primarily due to increased corn origination fees paid to the agribusiness and energy services segment as a result of higher corn volumes processed.

#### Corporate Activities

Operating loss related to corporate activities for the nine months ended September 30, 2024, was primarily impacted by an increase in gain on sale of assets and a decrease in corporate activities of \$3.3 million for the six months ended June 30, 2024 personnel costs compared to the same period in 2023, primarily due to decreased personnel costs. 2023.

#### 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 or from debt and equity capital markets. 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 based on these factors remains sufficient and provides a solid foundation to meet our future liquidity and capital resource requirements.

On June 30, 2024 September 30, 2024, we had \$195.6 million \$227.5 million in cash and cash equivalents and \$29.5 million \$24.5 million in restricted cash. We also had \$219.6 million \$228.5 million available under our committed revolving credit agreement, subject to restrictions or other lending conditions. Funds at certain subsidiaries are generally required for their ongoing operational needs and restricted from distribution. At June 30, 2024 September 30, 2024, our subsidiaries had approximately \$112.8 million \$92.0 million of net assets that were not available to use in the form of dividends, loans or advances due to restrictions contained in their credit facilities.

Net cash used in operating activities was \$65.7 million \$3.0 million for the six nine months ended June 30, 2024 September 30, 2024, compared with net cash used in operating activities of \$168.4 million \$55.4 million for the same period in 2023. Net cash used in operating activities compared to the prior year was primarily affected by a lower net loss as well as a decrease in cash used related to lower payments of accounts payables and for inventory when compared to the same period of the prior year. Net cash used in investing activities was \$55.5 million \$34.6 million for the six nine months ended June 30, 2024 September 30, 2024 compared with net cash used in investing activities of \$57.6 million \$69.1 million for the same period in 2023. Investing activities compared to the prior year were primarily affected by proceeds from the Birmingham Transaction in addition to a decrease in capital expenditures partially offset by an increase in investments in equity method investments. expenditures. Net cash used in financing activities was \$32.4 million \$89.2 million for the six nine months ended June 30, 2024 September 30, 2024 compared with net cash provided used by financing activities of \$85.5 million \$9.7 million for the same period in 2023, primarily due to lower net proceeds from short-term borrowing arrangements and the retirement of debt related to the partnership along with the extinguishment of non-controlling interest when compared to the same period in 2023.

Additionally, Green Plains Finance Company, Green Plains Trade, Green Plains Grain and Green Plains Commodity Management 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 net capital expenditures of approximately \$39.5 million \$67.8 million during the six nine months ended June 30, 2024 September 30, 2024, primarily for the clean sugar expansion project at Shenandoah and for various other capital projects. Capital spending for the remainder of 2024 is expected to be between \$50.0 million \$20.0 million and \$70.0 million \$30.0 million, which is subject to review prior to the initiation of any project. This excludes an estimated \$110 million of additional expenditures related to our carbon

capture and sequestration projects expected to occur in 2024 and 2025 and to be funded through project related financing. The 2024 estimate includes additional expenditures to deploy FQT's CST™ technology, as well as expenditures for various other capital projects, which are expected to be financed with cash on hand and with cash provided by operating activities.

Our business is highly sensitive to the price of commodities, particularly for corn, ethanol, distillers grains (including Ultra-High Protein), renewable corn oil and natural gas. 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. 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.

In August 2014 and October 2019, our board of directors authorized a share repurchase program of up to \$200.0 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. Since the inception of the repurchase program, we have repurchased 7.4 million shares of common stock for approximately \$92.8 million under the program. We did not repurchase any shares of common stock during the second third quarter of 2024.

We believe we have sufficient working capital for our existing operations. A continued sustained period of unprofitable operations, however, may strain our liquidity. We may sell additional assets or equity or borrow capital to improve or preserve our liquidity, expand our business or acquire businesses.

#### **Debt**

We were in compliance with our debt covenants at June 30, 2024 September 30, 2024. Based on our forecasts, we anticipate 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.

#### **Corporate Activities**

In March 2021, we issued \$230.0 million of unsecured 2.25% convertible senior notes due in 2027, or the 2.25% notes. The 2.25% notes bear interest at a rate of 2.25% per year, payable on March 15 and September 15 of each year. The initial conversion rate is 31.6206 shares of our common stock per \$1,000 principal amount of 2.25% notes (equivalent to an initial conversion price of approximately \$31.62 per share of our common stock), representing an approximately 37.5% premium over the offering price of our common stock. The conversion rate is subject to adjustment upon the occurrence of certain events, including but not limited to; the event of a stock dividend or stock split; the issuance of additional rights, options and warrants; spinoffs; or a tender or exchange offering. In addition, we may be obligated to increase the conversion rate for any conversion that occurs in connection with certain corporate events, including our calling the 2.25% notes for redemption. We may settle the 2.25% notes in cash, common stock or a combination of cash and common stock. At June 30, 2024 September 30, 2024, the outstanding principal balance on the 2.25% notes was \$230.0 million.

#### **Ethanol Production Segment**

On February 9, 2021, Green Plains SPE LLC, a wholly-owned special purpose subsidiary and parent of Green Plains Obion and Green Plains Mount Vernon issued \$125.0 million of junior secured mezzanine notes due February 2026 with BlackRock. These notes accrue interest at an annual rate of 11.75% and will mature on February 9, 2026.

Green Plains Shenandoah, a wholly-owned subsidiary, has a \$75.0 million secured loan agreement, which matures on September 1, 2035. During the second quarter of 2024, the agreement was modified to remove the Wood River facility from the assets considered to be secured under the loan agreement and Green Plains Wood River was removed as a counterparty to the loan agreement. At June 30, 2024 September 30, 2024, the outstanding principal balance was \$72.4 million \$72.0 million on the loan and the interest rate was 5.02% 5.52%.

Green Plains Partners, through a wholly owned subsidiary, has had a secured term loan to fund working capital, capital expenditures and other general partnership purposes. The term loan has a maturity date of July 20, 2026. The term loan does not require any principal payments; however, the partnership has the option to prepay \$1.5 million per quarter. Prepayments totaling \$1.5 million and \$3.0 million were made during the three and six months ended June 30, 2024, respectively. Interest on the term loan is was based on 3-month SOFR plus 8.26%, and is payable on. At September 30, 2024, the 15th day of each March, June, September and December. As of June 30, 2024, interest rate on the term loan had a balance was 13.21%. On September 30, 2024, the proceeds from the Birmingham Transaction were used to repay the outstanding principal and interest of the loan in full. Prepayments totaling \$53.0 million and an interest rate of 13.60%. \$56.0 million were made during the three and nine months ended September 30, 2024, respectively, and \$1.5 million and \$3.0 million during the three and nine months ended September 30, 2023, respectively.

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

#### **Agribusiness and Energy Services Segment**

Green Plains Finance Company, Green Plains Grain and Green Plains Trade have total senior secured revolving commitments of \$350.0 million and an accordion feature whereby amounts available under the facility may be increased by up to \$100.0 million of new lender commitments subject to certain conditions. The facility matures in March 2027. Each SOFR rate loan shall bear interest for each day at a rate per annum equal to the Term SOFR rate for the outstanding period plus a Term SOFR adjustment and an applicable margin of 2.25% to 2.50%, which is dependent on undrawn availability under the facility. Each base rate loan shall bear interest at a rate per annum equal to the base rate plus the applicable margin of 1.25% to 1.50%, which is dependent on undrawn availability under the facility. The unused portion of the facility is also subject to a commitment fee of 0.275%

to 0.375%, dependent on undrawn availability. At **June 30, 2024** **September 30, 2024**, the outstanding principal balance was **\$120.0 million** **\$109.0 million** on the facility and the interest rate was **8.74%** **8.11%**.

Green Plains Commodity Management has an uncommitted \$40.0 million secured revolving credit facility to finance margins related to its hedging programs. During the first quarter of 2023, this revolving credit facility was extended five years to mature on April 30, 2028. Advances are subject to variable interest rates equal to SOFR plus 1.75%. At **June 30, 2024** **September 30, 2024**, the outstanding principal balance was **\$4.6 million** **\$14.1 million** on the facility and the interest rate was **7.09%** **6.59%**.

Green Plains Grain has a short-term inventory financing agreement with a financial institution. The company has accounted for the agreement as short-term notes, rather than revenues, and has elected the fair value option to offset fluctuations in market prices of the inventory. This agreement is subject to negotiated variable interest rates. The company had no outstanding short-term notes payable related to the inventory financing agreement as of **June 30, 2024** **September 30, 2024**.

Refer to *Note 8 – Debt* in the notes to the consolidated financial statements included herein for more information about our debt.

#### **Effects of Inflation**

We have experienced inflationary impacts on labor costs, wages, components, equipment, other inputs and services across our business and inflation and its impact could escalate in future quarters, many of which are beyond our control. Moreover, we have fixed price arrangements with our customers and are not able to pass those costs along in most instances. As such, inflationary pressures could have a material adverse effect on our performance and financial statements.

#### **Contractual Obligations and Commitments**

In addition to debt, our material future obligations include certain lease agreements and contractual and purchase commitments related to commodities, storage and transportation. Aggregate minimum lease payments under the operating lease agreements for future fiscal years as of **June 30, 2024** **September 30, 2024** totaled **\$91.2 million** **\$81.4 million**. As of **June 30, 2024** **September 30, 2024**, we had contracted future purchases of grain, distillers grains and natural gas valued at approximately **\$163.3 million** and **\$187.8 million**, future commitments for storage and transportation valued at approximately **\$19.8 million**, **\$26.3 million**, and accumulated commitments related to the construction of carbon capture and sequestration equipment at our three Nebraska plants of **\$7.2 million**. Refer to *Note 13 – Commitments and Contingencies* included in the notes to the consolidated financial statements included herein for more information.

#### **Critical Accounting Policies and Estimates**

Critical accounting policies, including those relating to 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, 2023.

#### **Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements.

#### **Item 3. Quantitative and Qualitative 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 the majority of our business in U.S. dollars and are not currently exposed to material 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 SOFR. At **June 30, 2024** **September 30, 2024**, we had **\$614.4 million** **\$559.8 million** in debt, **\$177.5 million** **\$123.1 million** of which had variable interest rates. A 10% increase in interest rates would affect our interest cost by approximately **\$1.8 million** **\$1.2 million** per year.

For additional information related to our debt, see *Note 8 – Debt* included herein as part of the notes to the consolidated financial statements and *Note 12 – Debt* included as part of the notes to the consolidated financial statements included in our annual report on Form 10-K for the year ended December 31, 2023.

#### **Commodity Price Risk**

Our business is highly sensitive to commodity price risk, particularly for ethanol, corn, distillers grains (including Ultra-High Protein), renewable corn oil and natural gas. Ethanol prices are sensitive to world crude oil supply and demand, the price of crude oil, gasoline, corn, the price of substitute fuels, refining capacity and utilization, government regulation and consumer demand for alternative fuels. Corn prices are affected by weather conditions, yield, changes in domestic and global supply and demand, and government programs and policies. Distillers grains and Ultra-High Protein prices are impacted by livestock numbers on feed, prices for feed alternatives and supply, which is associated with ethanol plant production. Renewable corn oil prices are impacted by prices for renewable diesel fuel, diesel fuel and competing feedstocks. 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.

To reduce the risk associated with fluctuations in the price of ethanol, corn, distillers grains, Ultra-High Protein, renewable corn oil and natural gas, 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, the New York Mercantile Exchange and the Chicago 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 months ended **June 30, 2024** **September 30, 2024**, revenues included net losses gains of **\$1.8 million** **\$16.1 million**, while cost of goods sold included net losses of **\$6.1 million** **\$4.2 million**, and during the **six nine** months ended **June 30, 2024** **September 30, 2024**, revenues included net losses gains of **\$1.9 million** **\$14.2 million**, and cost of goods sold included net losses of **\$5.7 million** **\$9.9 million**, 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, 2024** **September 30, 2024**, which is as follows (in thousands):

Commodity	Commodity	Estimated Total Volume Requirements for the Next 12 Months <sup>(1)</sup>		Net Income Effect of Approximate 10% Change in Price		Estimated Total Volume Requirements for the Next 12 Months <sup>(1)</sup>		Net Income Effect of Approximate 10% Change in Price	
		Unit of Measure	Commodity	Unit of Measure	Commodity	Unit of Measure	Commodity	Unit of Measure	Commodity
Ethanol	Ethanol	903,000	Gallons	\$112,136	Ethanol	903,000	Gallons	\$98,304	
Corn	Corn	310,000	Bushels	\$98,483	Corn	310,000	Bushels	\$99,487	
Distillers grains <sup>(2)</sup>	Distillers grains <sup>(2)</sup>	2,200	Tons <sup>(3)</sup>	\$25,927	Distillers grains <sup>(2)</sup>	2,200	Tons <sup>(3)</sup>	\$22,347	
Renewable corn oil	Renewable corn oil	300,000	Pounds	\$9,196	Renewable corn oil	300,000	Pounds	\$8,893	
Natural gas	Natural gas	26,400	MmBTU	\$4,568	Natural gas	26,400	MmBTU	\$4,630	

(1) Estimated volumes assume production at full capacity.

(2) Includes Ultra-High Protein.

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

#### Agribusiness and Energy Services Segment

In the agribusiness and energy services segment, our physical purchase and sale contracts and derivatives are marked to market. Our inventories are carried at the lower of average cost or net realizable value, except fair-value hedged inventories. 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 the 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.

#### Item 4. Controls and Procedures.

##### Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures designed to ensure the 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. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Under the supervision 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, 2024** **September 30, 2024** 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, 2023, in 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 Condition 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, 2023. 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.

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

The company withholds shares when restricted stock grants are vested to satisfy statutory minimum required payroll tax withholding obligations. The following table lists the shares that were withheld during the **second** **third** quarter of 2024:

Period	Total Number of Shares Withheld	Average Price Paid per Share
April 1 - April 30	—	—
May 1 - May 31	7,491	30.78
June 1 - June 30	—	—
<b>Total</b>	<b>7,491</b>	<b>\$ 30.78</b>

Period	Total Number of Shares Withheld	Average Price Paid per Share
July 1 - 31	—	—
August 1 - 31	866	15.13
September 1 - 30	239	12.88
<b>Total</b>	<b>1,105</b>	<b>\$ 14.64</b>

In August 2014 and October 2019, our board of directors authorized a share repurchase program of up to \$200 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. Since inception of the repurchase program, the company has repurchased approximately 7.4 million shares of common stock for approximately \$92.8 million under the program. We did not repurchase any shares during the **second** **third** quarter of 2024.

### Item 3. Defaults Upon Senior Securities.

None.

### Item 4. Mine Safety Disclosures.

Not applicable.

### Item 5. Other Information.

During the three months ended **June 30, 2024** **September 30, 2024**, no director or officer of the company adopted, modified or terminated a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement," as each term is defined in Item 408(a) of Regulation S-K.

**Item 6. Exhibits.**

**Exhibit Index**

Exhibit No.	Description of Exhibit
10.1	<a href="#">Modification to the Loan Agreement, dated May 24, 2024, by and among Green Plains Wood River LLC, and Green Plains Shenandoah, LLC, as the Borrowers, and MetLife Real Estate Lending LLC, as the Lender</a>
31.1	<a href="#">Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Section 302 of the Sarbanes-Oxley Act of 2002</a>
31.2	<a href="#">Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Section 302 of the Sarbanes-Oxley Act of 2002</a>
32.1	<a href="#">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</a>
32.2	<a href="#">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</a>
101	The following information from Green Plains Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended <a href="#">June 30, 2024</a> September 30, 2024, formatted in Inline Extensible Business Reporting Language (iXBRL): (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
104	The cover page from Green Plains Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended <a href="#">June 30, 2024</a> September 30, 2024, formatted in iXBRL.

**SIGNATURES**

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 6, 2024](#) October 31, 2024

By: [/s/ Todd A. Becker](#)

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

Date: [August 6, 2024](#) October 31, 2024

By: [/s/ James E. Stark](#)

James E. Stark  
Chief Financial Officer  
(Principal Financial Officer)

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[Exhibit 10.1](#)

[Loan 200527](#)

**MODIFICATION OF LOAN DOCUMENTS AND CONSENT TO RELEASE**

This Modification of Loan Documents and Consent to Release (this "Consent") is entered into as of May 24, 2024 (the "Effective Date") by and among Green Plains Wood River LLC, a Delaware limited liability company and Green Plains Shenandoah LLC, a Delaware limited liability company (collectively, the "Original

Borrowers") and MetLife Real Estate Lending LLC, a Delaware limited liability company ("Lender").

WHEREAS, Original Borrower executed and delivered to Lender a Promissory Note dated as of September 3, 2020, in the original principal amount of SEVENTY-FIVE MILLION AND NO/100 DOLLARS (\$75,000,000.00) ("Note"), as further evidence by a Loan Agreement dated as of the date of the Note among Original Borrowers and Lender (as amended, the "Loan Agreement") and secured by a Deed of Trust, Security Agreement, Assignment of Leases and Rents and Fixture Filing dated September 3, 2020 from Green Plains Wood River LLC in favor of Lender, recorded in the office of the Register of Deeds of Hall County, Nebraska as Instrument #202006587 and re-recorded on September 8, 2020, in the office of the Register of Deeds of Hall County, Nebraska as Instrument #202006667 (the "Hall County Deed of Trust"), Deed of Trust, Security Agreement, Assignment of Leases and Rents and Fixture Filing dated September 3, 2020 from Green Plains Wood River LLC in favor of Lender, recorded on September 3, 2020, in the office of the Register of Deeds of Buffalo County, Nebraska as Instrument #2020-06191 and re-recorded on September 8, 2020, in the office of the Register of Deeds of Buffalo County, Nebraska as Instrument #2020-06244 (the "Buffalo County Deed of Trust"), and the Mortgage, Security Agreement, Assignment of Leases and Rents and Fixture Filing dated September 3, 2020 from Green Plains Shenandoah LLC in favor of Lender, which was recorded on September 23, 2020 with the Fremont County, Iowa Recorder, in Book 2020 at Page 1061 and re-recorded on September 8, 2020 with the Fremont County, Iowa Recorder, in Book 2020 at Page 1077 (the "Iowa Mortgage"). The Loan Agreement, Note, Hall County Deed of Trust, Buffalo County Deed of Trust, Iowa Mortgage and all other documents evidencing and/or securing the loan are, collectively, the "Loan Documents". Capitalized terms used herein but not otherwise defined shall have the meanings attributed to them in the Loan Agreement.

WHEREAS, Original Borrowers have requested that Lender consent and agree to release Green Plains Wood River LLC (hereinafter, the "Released Borrower") from further liability under the Loan Documents and to release Lender's lien on Released Borrower's real estate and personal property described in the Hall Deed of Trust and the Buffalo County Deed of Trust, all of which Lender has granted its consent, subject to the terms and conditions set forth herein.

WHEREAS, Green Plains Shenandoah LLC ("Reaffirming Borrower") joins in this Consent, to evidence its consent to the transactions herein and to reaffirm and ratify its obligations as the remaining "Borrower" under the Loan Documents.

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NOW, THEREFORE, the parties hereby agree as follows:

1. Released Borrower and Reaffirming Borrower represent, warrant and acknowledge that there is good and valuable consideration for the agreements of the parties herein.
2. Reaffirming Borrower represents and warrants that all representations, warranties and covenants contained in the Loan Documents remain true and correct as of the date hereof. Reaffirming Borrower acknowledges that there is no event of default under the Loan Documents, that the obligations and undertakings of Reaffirming Borrower are valid and enforceable according to their terms. Reaffirming Borrower and Released Borrower each acknowledge that it has no claims, defenses or offsets to their obligations and undertakings in the Loan Documents. Additionally, Reaffirming Borrower authorizes Lender to file such financing statements and amendments and continuations thereto as Lender deems necessary to perfect its security interest or to prevent its security interest from becoming unsecured or lapsing.
3. Reaffirming Borrower and Released Borrower each further: (a) represent that it is not insolvent as of the date hereof or will not become insolvent, as a result of the matters herein; and (b) the transactions described herein are not entered into to delay, hinder or defraud any creditor of such parties.
4. Within five (5) Business Days after the Effective Date, Lender will file Deeds of Reconveyance of the Hall County Deed of Trust and the Buffalo County Deed of Trust to release its lien on Released Borrower's property described therein and will file UCC-3 terminations of any UCC-1 financing statements naming Released Borrower as debtor and Lender as secured party.
5. Effective as of the Effective Date, Released Borrower shall automatically be released from any further liability under the Loan Documents, provided, however, the provisions of this paragraph shall not impair the right of Lender to bring suit against Released Borrower (a) based upon any acts or events occurring, or obligations under the Loan Documents that arise out of circumstances or conditions existing as of the Effective Date or (b) for any criminal or

tortious conduct, intentional misrepresentations or fraud, or any waste or environmental contamination of the Property caused by Original Borrowers existing as of the Effective Date.

6. In consideration for Lender's consent contained herein, Released Borrower hereby agrees as follows (Lender, any loan servicers, and their respective officers, directors, shareholders, representatives, employees, servicers, agents, attorneys, trustees, partners, contractors, advisors, subsidiaries, affiliates, predecessors, successors or assigns shall be referred to herein, collectively, as the "Lender Parties").

(a) The Released Borrower hereby: (i) fully and finally acquits, quitclaims, releases, relinquishes, waives and discharges each of the Lender Parties of and from any and all obligations, claims, liabilities, damages, demands, debts, liens, deficiencies, suits, costs or cause or causes of action (including claims and

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causes of action for usury) to, of or for the benefit (whether directly or indirectly) of the Released Borrower, or any of them individually, at law or in equity, known or unknown, contingent or otherwise, whether asserted or unasserted, whether now known or hereafter discovered, whether statutory, in contract or in tort, as well as any other kind or character of action now held, owned or possessed (whether directly or indirectly) by the Released Borrower on account of, arising out of, related to or concerning, whether directly or indirectly, proximately or remotely any Loan Documents or this Consent; (ii) waives any and all defenses to payment of the Loan for any reason; and (iii) waives any and all defenses, counterclaims or offsets to the Loan Documents (collectively, the "Released Claims");

(b) In addition to the releases contained hereinabove, and not in limitation thereof, the Released Borrower hereby agrees that it shall forever not prosecute, or voluntarily aid in the prosecution of, any of the Released Claims, whether by claim, counterclaim or otherwise; and

(c) If, and to the extent that, any of the Released Claims are, for any reason whatsoever, not released and discharged pursuant to the provisions of paragraph (a) above, the Released Borrower hereby absolutely and unconditionally grants, sells, bargains, transfers, assigns and conveys unto Lender or the Lender Parties, as applicable, each and every of the Released Claims and any proceeds, settlements and distributions relating thereto.

7. Remaining Borrower hereby consents to the release of Released Borrower from its obligations under the Loan Documents and to Lender's release of its lien on Released Borrower's real estate and personal property encumbered by the Hall County Deed of Trust or the Buffalo County Deed of Trust. Remaining Borrower acknowledges that, due to the foregoing releases, effective as of April 1, 2024, the IRP added to the interest rate described in Section 3 of the Note has moved to Level 1 and will continue to adjust in accordance with Section 3 of the Note.

8. From and after the date of this Consent, (a) all statements or references within the text of the Loan Documents to (i) the "Borrower" or "debtor" shall mean and refer to Green Plains Shenandoah LLC; (ii) the "Land" shall mean and refer to the real property subject to the Security Instrument in Fremont County, Iowa; (b) all statements or references within the text of the Loan Documents to the "Security Instrument" or "Mortgage" shall mean and be references to the Iowa Mortgage (as defined herein); (c) all statements or references within the text of the Loan Documents to "the Loan Documents" shall exclude any references to the Hall County Deed of Trust and the Buffalo County Deed of Trust; and (d) all references within the text of the Loan Documents to any Land or Facility located in Wood River, Hall County, Nebraska, are deleted.

9. This Consent is an amendment to, and modification of, the Loan Documents. This Consent is not a novation of the liens and security interests created by the Iowa Mortgage, and Remaining Borrower hereby reaffirms that the liens and security interests created by the Iowa Mortgage

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continue to secure the debt evidenced by the Note. The execution, delivery, and effectiveness of this Consent shall not, except as expressly provided herein, operate as a waiver of any right, power, or remedy of Lender under the Loan Documents, nor constitute a waiver of any provision of the Loan Documents. In all respects not inconsistent herewith, the Loan Documents (other than the Hall County Deed of Trust and the Buffalo County Deed of Trust, both of which are being reconveyed by Lender) shall otherwise remain unaffected, unchanged, and unimpaired and in full force and effect.

10. This Agreement may be executed in any number of counterparts, each of which counterparts shall be deemed to be an original and all of which together shall constitute but one and the same Agreement.
11. This Agreement shall be governed by and construed in accordance with the laws of the state of Iowa. Concurrently with the execution of this Consent, Reaffirming Borrower will pay to (a) Lender a servicing fee in the amount of \$2,500 and all other third party fees incurred by Lender in connection with this Consent, including any appraisal and recording fees and (b) Lender's counsel, Baird Holm LLP, the legal fees incurred by Lender in connection with the transactions contemplated by this Consent.

IN WITNESS WHEREOF, this agreement was executed as of the Effective Date.

**REAFFIRMING BORROWER:**

GREEN PLAINS SHENANDOAH LLC, a Delaware limited liability company

By: **Green Plains Inc.**, an Iowa corporation  
Sole Member of Green Plains Shenandoah LLC

By: /s/ James E. Stark  
Name: James E. Stark  
Title: Chief Financial Officer

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**RELEASED BORROWER:**

**Green Plains Wood River LLC**  
a Delaware limited liability company

By: **Green Plains Inc.**, an Iowa corporation  
Sole Member of Green Plains Wood River LLC

By: /s/ James E. Stark  
Name: James E. Stark  
Title: Chief Financial Officer

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**LENDER:**

**MetLife Real Estate Lending LLC**  
a Delaware limited liability company

By: MetLife Investment Management, LLC,  
its investment manager

By: /s/ Ramsey Meigs

Name: Ramsey Meigs

Its: Authorized Signatory and Director

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**Exhibit 31.1**

**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.

Todd A. Becker

*President and Chief Executive Officer  
(Principal Executive Officer)*

**Exhibit 31.2**

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

I, James E. Stark, 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.

James E. Stark

*Chief Financial Officer  
(Principal Financial Officer)*

**Exhibit 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**

In connection with the Quarterly Report of Green Plains Inc. (the "company") on Form 10-Q for the fiscal quarter ended **June 30, 2024** **September 30, 2024**, 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 6, 2024** **October 31, 2024**

*/s/ Todd A. Becker*

Todd A. Becker

*President and Chief Executive Officer*

**Exhibit 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**

In connection with the Quarterly Report of Green Plains Inc. (the "company") on Form 10-Q for the fiscal quarter ended **June 30, 2024** **September 30, 2024**, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, James E. Stark, 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 6, 2024** **October 31, 2024**

*/s/ James E. Stark*

James E. Stark

*Chief Financial Officer*

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