

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED JANUARY 31, 2019

COMMISSION FILE NO. 001-09097

REX AMERICAN RESOURCES CORPORATION
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

31-1095548
(I.R.S. Employer Identification No.)

7720 Paragon Road, Dayton, Ohio
(Address of principal executive offices)

45459
(Zip Code)

Registrant's telephone number, including area code (937) 276-3931

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

Title of each class	Name of each exchange on which registered
Common Stock, \$.01 par value	New York Stock Exchange

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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. (check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
Emerging growth company
(Do not check if a smaller reporting company)

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act) Yes No

At the close of business on July 31, 2018 the aggregate market value of the registrant's outstanding Common Stock held by non-affiliates of the registrant (for purposes of this calculation, 696,789 shares beneficially owned by directors and executive officers of the registrant were treated as being held by affiliates of the registrant), was \$435,431,150.

There were 6,274,419 shares of the registrant's Common Stock outstanding as of March 28, 2019.

Documents Incorporated by Reference

Portions of REX American Resources Corporation's definitive Proxy Statement for its Annual Meeting of Shareholders on June 12, 2019 are incorporated by reference into Part III of this Form 10-K.

FORWARD-LOOKING STATEMENTS

This Form 10-K contains or may contain forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. Such statements can be identified by use of forward-looking terminology such as “may,” “expect,” “believe,” “estimate,” “anticipate” or “continue” or the negative thereof or other variations thereon or comparable terminology. Readers are cautioned that there are risks and uncertainties that could cause actual events or results to differ materially from those referred to in such forward-looking statements. These risks and uncertainties include the risk factors set forth from time to time in the Company’s filings with the Securities and Exchange Commission and include among other things: the impact of legislative and regulatory changes, the price volatility and availability of corn, distillers grains, ethanol, non-food grade corn oil, gasoline, natural gas, our ethanol and refined coal plants operating efficiently and according to forecasts and projections, changes in the international, national or regional economies, weather, results of income tax audits, changes in income tax laws or regulations, the impact of U.S. foreign trade policy, changes in foreign currency exchange rates and the effects of terrorism or acts of war. The Company does not intend to update publicly any forward-looking statements except as required by law. Other factors that could cause actual results to differ materially from those in the forward-looking statements are set forth in Item 1A.

AVAILABLE INFORMATION

REX makes available free of charge on its Internet website its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. REX’s Internet website address is www.rexamerican.com. The contents of the Company’s website are not a part of this report.

PART I

Item 1. Business

References to “we”, “us”, “our”, “REX” or “the Company” refer to REX American Resources Corporation and its majority owned subsidiaries.

Fiscal Year

All references in this report to a particular fiscal year are to REX’s fiscal year ended January 31. For example, “fiscal year 2018” means the period February 1, 2018 to January 31, 2019. We refer to our fiscal year by reference to the year immediately preceding the January 31 fiscal year end date.

Overview

REX was incorporated in Delaware in 1984 as a holding company. Our principal offices are located at 7720 Paragon Road, Dayton, Ohio 45459. Our telephone number is (937) 276-3931. We have been an investor in ethanol production facilities beginning in 2006. We are currently invested in three ethanol production entities; we have a majority ownership interest in two of these entities. We also own a majority interest in an entity that owns and operates a refined coal facility. We may make additional investments in the energy or other industries in the future. In the third quarter of fiscal year 2017, we began reporting the results of our refined coal operation as a new segment as a result of the August 10, 2017 acquisition of an entity that operates a refined coal facility (see Note 4 to the Consolidated Financial Statements). Prior to the acquisition, we had one reportable segment, ethanol. Beginning with the third quarter of fiscal year 2017, we have two reportable segments: i) ethanol and by-products and ii) refined coal.

Our ethanol operations are highly dependent on commodity prices, especially prices for corn, ethanol, distillers grains, non-food grade corn oil and natural gas. As a result of price volatility for these commodities, our operating results can fluctuate substantially. The price and availability of corn is subject to significant fluctuations depending upon a number of factors that affect commodity prices in general, including crop conditions, weather, federal policy and foreign trade. Because the market prices of ethanol and distillers grains are not always directly related to corn prices, at times ethanol and/or distillers grains prices may lag movements in corn prices. In an environment of higher corn prices or lower ethanol/distillers grains prices, the overall margin structure at the plants could be reduced. As a result, at times, we may operate our plants at negative or minimally positive operating margins.

We expect our ethanol plants to produce approximately 2.8 gallons of denatured ethanol for each bushel of grain processed in the production cycle. We refer to the actual gallons of denatured ethanol produced per bushel of grain processed as the realized yield. We refer to the difference between the price per gallon of ethanol and the price per bushel of grain (divided by the realized yield) as the "crush spread." Should the crush spread decline, it is possible that our ethanol plants will generate operating results that do not provide adequate cash flows for sustained periods of time. In such cases, production at the ethanol plants may be reduced or stopped altogether in order to minimize variable costs at individual plants.

We attempt to manage the risk related to the volatility of commodity prices by utilizing forward grain purchase, forward ethanol, distillers grains and non-food grade corn oil sale contracts and commodity futures agreements as management deems appropriate. We attempt to match quantities of these sales contracts with an appropriate quantity of grain purchase contracts over a given period of time when we can obtain an adequate gross margin resulting from the crush spread inherent in the contracts we have executed. However, the market for future ethanol sales contracts generally lags the spot market with respect to ethanol price. Consequently, we generally execute fixed price contracts for no more than four months into the future at any given time and we may lock in our corn or ethanol price without having a corresponding locked in ethanol or corn price for short durations of time. As a result of the relatively short period of time our fixed price contracts cover, we generally cannot predict the future movements in the crush spread for more than four months; thus, we are unable to predict the likelihood or amounts of future income or loss from the operations of our ethanol facilities. We utilize derivative financial instruments, primarily exchange traded commodity future contracts, in conjunction with certain of our grain procurement activities.

Commodity prices in fiscal year 2018 were subject to significant volatility. For fiscal year 2018, the average Chicago Board of Trade ("CBOT") near-month corn price ranged from a low of approximately \$3.40 per bushel in July 2018 to a high of approximately \$4.08 per bushel in May 2018. Corn prices were impacted throughout the year from consecutive strong corn harvests in 2017 and 2018. Ethanol prices had significant fluctuations ranging from a low of approximately \$1.20 per gallon in November 2018 to a high of approximately \$1.53 per gallon in March 2018. Ethanol prices were influenced by many factors throughout the year including domestic demand, record exports and increases in U.S. ethanol production. Ethanol prices in 2018 were negatively impacted, in part, by increased small refiner waivers granted by the Environmental Protection Agency ("EPA") and the resulting reductions to the Renewable Fuel Standard ("RFS") obligations and ethanol demand.

On August 10, 2017, we purchased, through a 95.35% owned subsidiary, for approximately \$12.0 million the entire ownership interest of an entity that owns a refined coal facility. We began operating the refined coal facility immediately after the acquisition. We expect that the refined coal operating results will be subsidized by federal production tax credits through November 2021, subject to meeting qualified emissions reductions as governed by Section 45 of the Internal Revenue Code ("IRC"). In order to maintain compliance with Section 45 of the Internal Revenue Code, we are required to test every six months, through an independent laboratory, the effectiveness of our process with respect to emissions reductions. Annually, the IRS publishes the amount

of federal income tax credit earned per ton of refined coal produced and sold for a given calendar year, which for 2018 is \$7.03 per ton.

Net income attributable to REX common shareholders was approximately \$31.6 million in fiscal year 2018 compared to approximately \$39.7 million in fiscal year 2017. The current year benefitted from reductions in our effective tax rate resulting from the impact of federal production tax credits associated with our refined coal operations and from the impact of research and experimentation credits associated with our ethanol and by-products operations. Fiscal year 2017 benefitted from the impact of tax reform legislation as we remeasured our net deferred tax liabilities at a significantly lower tax rate. Gross profit in fiscal year 2018 was significantly lower compared to fiscal year 2017, primarily a result of lower ethanol crush spreads and the impact of our refined coal facility which generated a gross loss for a full year of operations in fiscal year 2018 compared to a partial year of operations in fiscal year 2017. Due to the inherent volatility of commodity prices within the ethanol industry, the uncertainty regarding future refined coal production and associated financial results, we cannot predict the likelihood of future operating results being similar to the fiscal year 2018 results.

During fiscal year 2013, we entered into a joint venture with Hytken HPGP LLC (“Hytken”) to file and defend patents for eSteam technology relating to heavy oil and oil sands production methods, and to attempt to commercially exploit the technology to generate license fees, royalty income and development opportunities. The patented technology is an enhanced method of heavy oil recovery involving zero emissions downhole steam generation. To date, we have paid approximately \$2.0 million to purchase our ownership interest and fund patent and other expenses. We have not successfully demonstrated that the technology is commercially feasible. We own 60% and Hytken owns 40% of the entity named Future Energy, LLC (“Future Energy”), an Ohio limited liability company. Future Energy is managed by a board of three managers, two appointed by us and one by Hytken.

We plan to seek and evaluate various investment opportunities including energy related, agricultural or other ventures we believe fit our investment criteria. We can make no assurances that we will be successful in our efforts to find such opportunities.

Ethanol and by-products Overview

We began investing in the ethanol industry during fiscal year 2006. The form and structure of our investments is tailored to the specific needs and goals of each project and the local farmer group or investor with whom we are partnering. We generally participate in the management of our projects through our membership on the board of managers of the limited liability companies that own the plants.

We have equity investments in three entities engaged in the production of ethanol as of January 31, 2019. The following table is a summary of our ethanol investments at January 31, 2019 (gallons in millions):

Entity	Trailing 12 Months Ethanol Gallons Shipped	REX's Current Ownership Interest	Current Effective Ownership of Trailing 12 Months Ethanol Gallons Shipped
One Earth Energy, LLC	141.9	75.1%	106.6
NuGen Energy, LLC	143.9	99.5%	143.2
Big River Resources, LLC:			
Big River Resources W Burlington, LLC	109.8	10.3%	11.3
Big River Resources Galva, LLC	128.8	10.3%	13.3
Big River United Energy, LLC	131.7	5.7%	7.5
Big River Resources Boyceville, LLC	58.3	10.3%	6.0
Total	714.4		287.9

Ethanol Industry

Ethanol is a renewable fuel source produced by processing corn and other biomass through a fermentation process that creates combustible alcohol that can be used as an additive or replacement to fossil fuel based gasoline. The majority of ethanol produced in the United States is made from corn because of its wide availability and ease of convertibility from large amounts of carbohydrates into glucose, the key ingredient in producing alcohol that is used in the fermentation process. Ethanol production can also use feedstocks such as grain sorghum, switchgrass, wheat, barley, potatoes and sugarcane as carbohydrate sources. Most ethanol plants have been located near large corn production areas, such as Illinois, Indiana, Iowa, Minnesota, Nebraska, Ohio and South Dakota. Railway access and interstate access are vital for ethanol facilities due to the large amount of raw materials and finished goods required to be shipped to and from the ethanol plant facilities.

According to the Renewable Fuels Association ("RFA"), the United States ethanol industry produced an estimated 16.1 billion gallons of ethanol in 2018. Approximately 14.5 billion gallons were blended domestically and approximately 1.7 billion gallons were exported in 2018. According to the RFA, as of January 2019, the United States ethanol industry consists of 210 plants (199 operating) in 27 states with an annual capacity of approximately 16.5 billion gallons (approximately 16.0 billion gallons at operating plants) of ethanol production. The RFA estimates that, as of January 2019, approximately 350 million gallons per year of additional production capacity is under construction or expansion.

On December 19, 2007, the Energy Independence and Security Act of 2007 (the "Energy Act of 2007") was enacted. The Energy Act of 2007 established new levels of renewable fuel mandates, including two different categories of renewable fuels: conventional biofuels and advanced biofuels. Corn-based ethanol is considered a conventional biofuel which is subject to a renewable fuel standard ("RFS") of 15.0 billion gallons annually through 2022. After 2022, RFS volumes will be determined by the Environmental Protection Agency ("EPA") in coordination with the Secretaries of Energy and Agriculture.

The federal government mandates the use of renewable fuels under RFS II, established in October 2010. The EPA has the authority to waive the mandates in whole or in part if one of two conditions is met: 1) there is inadequate domestic renewable fuel supply, or 2) implementation of the mandate requirement severely harms the economy or environment of a state, region or the United States. In 2014, 2015 and 2016, the EPA took action to reduce the volumes for both conventional biofuels and advanced biofuels.

The U.S. Federal District Court for the D.C. Circuit ruled on July 28, 2017, in favor of the Americans for Clean Energy and its petitioners against the EPA related to its decision to lower the 2016 volume requirements. The Court concluded the EPA erred in how it interpreted the “inadequate domestic supply” waiver provision of RFS II, which authorizes the EPA to consider supply-side factors affecting the volume of renewable fuel available to refiners, blenders, and importers to meet the statutory volume requirements. The waiver provision does not allow the EPA to consider the volume of renewable fuel available to consumers or the demand-side constraints that affect the consumption of renewable fuel by consumers. As a result, the Court vacated the EPA’s decision to reduce the total renewable fuel volume requirements for 2016 through its waiver authority, which the EPA is expected to address.

Pursuant to RFS II, if mandatory renewable fuel volumes are reduced by at least 20% for two consecutive years, the EPA is required to modify, or reset, statutory volumes through 2022. While conventional ethanol was maintained at 15.0 billion gallons, 2019 is the second consecutive year the total proposed renewable volume obligations (“RVOs”) are more than 20% below statutory volumes levels. Thus, the EPA Administrator directed his staff to initiate the reset rulemaking process and the EPA will modify statutory volumes through 2022 based upon the same factors used to set the post 2022 RVOs. These factors include environmental impact, domestic energy security, expected production, infrastructure, consumer costs, job creation, agriculture commodities, food prices and rural economic development.

Obligated parties use renewable identification numbers (“RINs”) to show compliance with RFS-mandated volumes. RINs are attached to renewable fuels by producers and detached when the renewable fuel is blended with transportation fuel or traded in the open market. The market price of detached RINs affects the price of ethanol in certain markets and influences the purchasing decisions by obligated parties. Certain obligated parties petitioned the EPA to move the point of obligation from refiners and importers of fuel to fuel blenders. In November 2017, the EPA denied this petition to change the point of obligation under RFS II to the parties that own the gasoline before it is sold. In March 2019, the EPA sent reform measures to the White House to control speculation in RIN values by barring trading from non-industry participants, publicizing large RIN positions, limiting the length of time a non-obligated party can hold RINs and increasing the compliance frequency to quarterly rather than annually.

On January 26, 2018, in separate court actions, both Valero Energy and American Fuel and Petrochemical and Manufacturers challenged the EPA regarding the EPA’s management of the U.S. biofuel mandate. Amongst their challenges are the EPA’s November 2017 decision to reject proposed changes to the structure of the RFS including the point of obligation, and the plaintiffs are seeking a review of the annual Renewable Volume Obligations rule set by the EPA for 2018 and 2019.

Under the RFS II, a small refiner that processes less than 75,000 barrels per day can petition the EPA for a waiver of their requirement to submit RINs. The EPA, through consultation with the Department of Energy and the Department of Agriculture, can grant the refiner a full or partial waiver, or deny the waiver. The EPA granted significantly more of these waivers for 2016 and 2017 than they had for previous years, totaling approximately 2.6 billion gallons of waived requirement for the two years combined. This effectively reduced the RFS II mandated volumes for those compliance years by those waived amounts, and has lowered RIN values significantly over the past calendar year.

Biofuels groups have filed a lawsuit in the U.S. Federal District Court for the D.C. circuit, challenging the 2019 RVO rule over the EPA’s failure to address small refinery exemptions in the rulemaking. This is the first RFS rulemaking since the expanded use of the exemptions came to light. To date, the EPA has refused to cap the number of waivers it grants or how it accounts for the retroactive waivers in its percentage standard calculations. Even if all the obligated parties comply with their respective percentage obligations for 2019, the country’s overall supply of renewable fuel will not meet the total volume requirements set by the EPA. Biofuels groups argue the EPA must therefore adjust its percentage standard calculations to make up for past retroactive waivers and adjust the standards to account for any waivers it reasonably expects to grant in the future.

Ethanol Production

The plants we have invested in are designed to use the dry milling method of producing ethanol. In the dry milling process, the entire corn kernel is first ground into flour, which is referred to as “meal,” and processed without separating out the various component parts of the grain. The meal is processed with enzymes, chemicals and water, and then placed in a high-temperature cooker. It is then transferred to fermenters where yeast is added and the conversion of sugar to ethanol begins. After fermentation, the resulting liquid is transferred to distillation columns where the ethanol is separated from the remaining “stillage” for fuel uses. The anhydrous ethanol is then blended with a denaturant, such as natural gasoline, to render it undrinkable and thus not subject to beverage alcohol tax. With the starch elements of the corn consumed in the above described process, the principal co-product produced by the dry milling process is dry distillers grains with solubles, or DDGS. DDGS is sold as a protein used in animal feed, which recovers a portion of the corn cost not absorbed in ethanol production. Depending on market and operating conditions, we may also sell modified distillers grains or wet distillers grains by removing less liquid content compared to DDGS. We also generate revenues from the sale of non-food grade corn oil produced at our facilities. Non-food grade corn oil is sold to the animal feed market, as well as biodiesel and other chemical markets.

The Primary Uses of Ethanol

Blend component. Today, much of the ethanol blending in the U.S. is done to meet the RFS. Most regular gasoline is produced using blendstock with an octane rating of 84, which is then increased to 87 (the minimum octane rating required in most states) by adding 10% ethanol according to the RFA. The industry is attempting to expand the E-85 market, as well as to raise the federal cap on ethanol blend above the current 10% for most vehicles in use. The EPA has approved the use of 15% ethanol (“E-15”) in gasoline for cars, SUVs and light duty trucks made in 2001 and later. However, the EPA did not grant E-15 the same vapor pressure waiver as E-10 so it can only currently be sold from September 16 through May 31 for those vehicles in most markets. On March 12, 2019, the EPA issued a proposed rule to remove the summer ban. The proposed rule is subject to a public hearing and comments.

Clean air additive. Ethanol is employed by the refining industry as a fuel oxygenate, which when blended with gasoline, allows engines to combust fuel more completely and reduce emissions from motor vehicles. Ethanol contains 35% oxygen, which results in more complete combustion of the fuel in the engine cylinder. Oxygenated gasoline is used to help meet certain federal and air emission standards.

Octane enhancer. Ethanol increases the octane rating of gasoline with which it is blended. As such, ethanol is used by gasoline suppliers as an octane enhancer both for producing regular grade gasoline from lower octane blending stocks and for upgrading regular gasoline to premium grades.

Legislation

The United States ethanol industry is highly dependent upon federal and state legislation. See Item 1A. Risk Factors for a discussion of legislation affecting the U.S. ethanol industry.

Refined Coal Overview

On August 10, 2017, we purchased, through a 95.35% owned subsidiary, the entire ownership interest of an entity that owns a refined coal facility. We began operating the refined coal facility immediately after the acquisition. Using licensed technology, our plant applies two separate chemicals to convert feedstock coal into refined coal, which is sold to the end user of the refined coal. We expect that the refined coal operating results will be subsidized by federal production tax credits through November 2021, subject to meeting qualified emissions reductions as governed by Section 45 of the Internal Revenue Code (“IRC”). In order to maintain compliance with Section 45 of the IRC, we are required to test every six months, through an independent laboratory, the effectiveness of our process with respect to emissions reductions. Annually, the IRS publishes the amount of federal income tax credit earned per ton of refined coal produced and sold for a given calendar year, which for 2018 is \$7.03 per ton.

Section 45 of the IRC was created by Congress to encourage the development and use of environmentally sound solutions to control harmful emissions during energy production and to facilitate and move the United States towards better compliance with global environmental energy standards. The American Jobs Creation Act of 2004 amended Section 45 of the IRC by adding provisions to incentivize the production of emission reducing refined coal. To qualify for tax credits under Section 45 of the IRC, a process must reduce coal emissions of nitrogen oxide by 20% and either sulfur dioxide or mercury by 40%. The tax credits can be earned for refined coal produced and sold by our facility through November 2021.

Facilities

At January 31, 2019, our consolidated ethanol entities own a combined 477 acres of land and two facilities that shipped a combined quantity of approximately 286 million gallons of ethanol in fiscal year 2018. We also own our corporate headquarters office building, consisting of approximately 7,500 square feet, located in Dayton, Ohio. We own a refined coal plant that is located on leased property on the site of an electrical generating station.

Employees

At January 31, 2019, we had 127 employees at our two consolidated ethanol plants and at our corporate headquarters. None of our employees are represented by a labor union. We expect this employment level to remain relatively stable. We consider our relationship with our employees to be good.

Service Marks

We have registered the service marks “REX”, and “Farmer’s Energy”, with the United States Patent and Trademark Office. We are not aware of any adverse claims concerning our service marks.

Item 1A. Risk Factors

We encourage you to carefully consider the risks described below and other information contained in this report when considering an investment decision in REX common stock. Any of the events discussed in the risk factors below may occur. If one or more of these events do occur, our results of operations, financial condition or cash flows could be materially adversely affected. In this instance, the trading price of REX stock could decline, and investors might lose all or part of their investment.

Risks Related to our Ethanol and by-Products Business

The ethanol industry is changing rapidly which could result in unexpected developments that could negatively impact our operations.

According to the RFA, the ethanol industry has grown from approximately 1.5 billion gallons of domestic annual ethanol production in 1999 to approximately 16.1 billion gallons in 2018. Thus, there have been significant changes in the supply and demand of ethanol over a relatively short period of time which could lead to difficulty in maintaining profitable operations at our ethanol plants.

The financial returns on our ethanol investments are highly dependent on commodity prices, which are subject to significant volatility, uncertainty and regional supply shortages, so our results could fluctuate substantially.

The financial returns on our ethanol investments are highly dependent on commodity prices, especially prices for corn, natural gas, ethanol, dried distillers grains, non-food grade corn oil and unleaded gasoline. As a result of the volatility of the prices for these items, our returns may fluctuate substantially and our investments could experience periods of declining prices for their products and increasing costs for their raw materials, which could result in operating losses at our ethanol plants.

Our returns on ethanol investments are highly sensitive to grain prices. Corn is the principal raw material our ethanol plants use to produce ethanol and co-products. As a result, changes in the price of corn can significantly affect our businesses. Rising corn prices result in higher production costs of ethanol and co-products. Because ethanol competes with non-corn-based fuels, our ethanol plants may not be able to pass along increased grain costs to our customers. At certain levels, grain prices may make ethanol uneconomical to produce.

The price of corn is influenced by weather conditions and other factors affecting crop yields, transportation costs, farmer planting decisions, exports, the value of the U.S. dollar and general economic, market and regulatory factors. These factors include government policies and subsidies with respect to agriculture and international trade and global and local demand and supply. The significance and relative effect of these factors on the price of corn is difficult to predict. Any event that tends to negatively affect the supply of corn, such as adverse weather or crop disease, could increase corn prices and potentially harm the business of our ethanol plants. Increasing domestic ethanol capacity could boost the demand for corn and result in increased corn prices. Much of the Midwestern United States experienced drought conditions during 2012 which led to a smaller harvest of corn and increased corn prices. Our ethanol plants may also have difficulty, from time to time, in physically sourcing corn on economic terms due to regional supply shortages, transportation issues, or unfavorable local pricing. Such a shortage or price impact could require our ethanol plants to suspend operations which would have a material adverse effect on our consolidated results of operations.

The spread between ethanol and corn prices can vary significantly. The gross margin at our ethanol plants depends principally on the spread between ethanol and corn prices. Fluctuations in the spread are likely to continue to occur. A sustained narrow or negative spread, whether as a result of sustained high or increased corn prices or sustained low or decreased ethanol prices, would adversely affect the results of operations at our ethanol plants.

Our risk management strategies may be ineffective and may expose us to decreased profitability and liquidity. In an attempt to partially offset the impact of volatility of commodity prices, we enter into forward contracts to sell a portion of our ethanol and distillers grains production and to purchase a portion of our corn and natural gas requirements. The financial impact of these risk management activities is dependent upon,

among other items, the prices involved and our ability to receive or deliver the commodities involved. Risk management activities can result in financial loss when positions are purchased in a declining market or when positions are sold in an increasing market. In addition, we may not be able to match the appropriate quantity of corn contracts with quantities of ethanol, distillers grains and non-food grade corn oil contracts. We vary the amount of risk management techniques we utilize, and we may choose not to engage in any risk management activities. Should we fail to properly manage the inherent volatility of commodities prices, our results of operations and financial condition may be adversely affected.

The market for natural gas is subject to market conditions that create uncertainty in the price and availability of the natural gas that our ethanol plants use in their manufacturing process. Our ethanol plants rely upon third parties for their supply of natural gas, which is consumed as fuel in the production process. The prices for and availability of natural gas are subject to volatile market conditions. These market conditions often are affected by factors beyond the ethanol plants' control, such as weather conditions, overall economic conditions and foreign and domestic governmental regulation and relations. Significant disruptions in the supply of natural gas could impair or completely prevent the ethanol plants' ability to economically manufacture ethanol for their customers. Furthermore, increases in natural gas prices or changes in our natural gas costs relative to natural gas costs paid by competitors may adversely affect results of operations and financial position at our ethanol plants.

Fluctuations in the selling price of commodities may reduce profit margins at our ethanol plants. Ethanol is marketed as a fuel additive to reduce vehicle emissions from gasoline, as an octane enhancer to improve the octane rating of gasoline with which it is blended and, to a lesser extent, as a gasoline substitute. As a result, ethanol prices are influenced by the supply and demand for gasoline and our ethanol plants' results of operations and financial position may be materially adversely affected if gasoline demand or prices decrease.

Distillers grains compete with other protein based animal feed products. The price of distillers grains may decrease when the prices of competing feed products decrease. The prices of competing animal feed products are based in part on the prices of the commodities from which their products are made. Historically, sales prices for distillers grains have tracked along with the price of corn. However, there have been instances when the price increase for distillers grains has lagged price increases in corn prices.

The production of distillers grains has increased as a result of increases in dry mill ethanol production in the United States. This could lead to price declines in what we can sell our distillers grains for in the future. Such declines could have an adverse material effect on our results of operations.

Increased ethanol production or decreases in demand for ethanol may result in excess production capacity in the ethanol industry, which may cause the price of ethanol, distillers grains and non-food grade corn oil to decrease.

According to the RFA, domestic ethanol production capacity is approximately 16.5 billion gallons per year as of January 2019. The RFA estimates that, as of January 2019, approximately 350 million gallons per year of additional production capacity is under construction or expansion. Certain operating plants have qualified as efficient ethanol producers through the EPA pathway assessment, and are expanding, or planning to expand their capacity. The EPA set the RFS requirement to be satisfied by corn-derived ethanol at 15.0 billion gallons for 2018 and 2019. However, the RFS requirements have been reduced through small refiner waivers issued by the EPA. These waivers were in the amount of approximately 2.6 billion gallons of ethanol for 2016 and 2017 combined. There have been no rulings on waiver requests for subsequent years. Excess capacity in the ethanol industry could have an adverse effect on the results of our operations. In a manufacturing industry with excess capacity, producers have an incentive to manufacture additional products for so long as the price exceeds the marginal cost of production (i.e., the cost of producing only the next unit, without regard for

interest, overhead or fixed costs). This incentive could result in the reduction of the market price of ethanol to a level that is inadequate to generate sufficient cash flow to cover costs.

Excess capacity may also result from decreases in the demand for ethanol, which could result from a number of factors, including, but not limited to, regulatory developments and reduced U.S. gasoline consumption. Reduced gasoline consumption could occur as a result of increased prices for gasoline or crude oil, which could cause businesses and consumers to reduce driving or acquire vehicles with more favorable gasoline mileage or acquire non-gasoline powered vehicles.

In addition, because ethanol production produces distillers grains and non-food grade corn oil as co-products, increased ethanol production will also lead to increased supplies of distillers grains and non-food grade corn oil. An increase in the supply of distillers grains and non-food grade corn oil, without corresponding increases in demand, could lead to lower prices or an inability to sell our ethanol plants' distillers grains and non-food grade corn oil production. A decline in the price of distillers grains or non-food grade corn oil could have a material adverse effect on the results of our ethanol operations.

The price of ethanol and distillers grains may decline as a result of trade restrictions or duties on ethanol and distillers grains exports from the United States or from unfavorable foreign currency exchange rates.

The United States exported approximately 1.7 billion gallons of ethanol in 2018. If producers and exporters of ethanol are subject to trade restrictions, or additional duties are imposed on exports, it may make it uneconomical to export ethanol. Brazil, China and the European Union all have trade barriers or tariffs against U.S. fuel ethanol. In 2013, the European Union imposed a five year tariff of \$83.33 per metric ton on U.S. fuel ethanol to discourage foreign competition. Effective January 1, 2017, China indicated its intention to raise its 5% tariff on U.S. and Brazil fuel ethanol to 30%. On April 1, 2018, China raised their tariff rate to 45%, and later raised it to 70% in the U.S. and China trade war. On September 1, 2017, Brazil imposed a 20% tariff on U.S. fuel ethanol imports in excess of 150 million liters, or 39.6 million gallons per quarter. The tariff is valid for two years. Furthermore, unfavorable changes in foreign currency exchange rates could reduce the demand for United States ethanol exports. This could result in an oversupply of ethanol in the United States which could have a material adverse effect on the results of our ethanol operations.

Exports of distillers grains produced in the United States have been increasing in recent years. In 2018, approximately 12.1 million metric tons ("mmt") were exported of the approximately 41.3 mmt produced in the U.S. However, the export market may be jeopardized if foreign governments impose trade barriers or other measures to protect the foreign local markets. The Chinese export market became less than 2% of global shipments in 2018 due to punitive tariffs established beginning January 2017 in effect for 5 years per the RFA. If producers and exporters of distillers grains are subjected to trade barriers when selling distillers grains to foreign customers, there may be a reduction in the price of distillers grains in the United States. In addition, foreign currency exchange rate fluctuations could reduce the demand for United States exports of distillers grains. Declines in the price we receive for our distillers grains could lead to decreased revenues and may result in our inability to operate our ethanol plants profitably.

Future demand for ethanol is uncertain and changes in overall consumer demand for transportation fuel could affect demand.

There are limited markets for ethanol other than what is federally mandated. Increased consumer acceptance of E15 and E85 fuel is likely necessary in order for ethanol to achieve significant market share growth beyond federal mandate levels.

We depend on our partners to operate certain of our ethanol investments.

Our investments currently represent both majority and minority equity positions. Day-to-day operating control of minority owned plants generally remains with the local investor group. We do not have the ability to directly modify the operations of these plants in response to changes in the business environment or in response to any deficiencies in local operations of the plants. In addition, local plant operators, who also represent the primary suppliers of corn and other crops to the plants, may have interests, such as the price and sourcing of corn and other crops, that may differ from our interest, which is based solely on the operating profit of the plant. The limitations on our ability to control day-to-day plant operations could adversely affect plant results of operations.

We may not successfully acquire or develop additional ethanol investments.

The growth of our ethanol business depends on our ability to identify and develop new ethanol investments. Our ethanol development strategy depends on referrals, and introductions, to new investment opportunities from industry participants, such as ethanol plant builders, financial institutions, marketing agents and others. We must continue to maintain favorable relationships with these industry participants, and a material disruption in these sources of referrals would adversely affect our ability to expand our ethanol investments.

Any expansion strategy will depend on prevailing market conditions for the price of ethanol and the cost of corn and natural gas and the expectations of future market conditions. There is increasing competition for suitable sites for ethanol plants. Even if suitable sites or opportunities are identified, we may not be able to secure the services and products from contractors, engineering firms, construction firms and equipment suppliers necessary to build or expand ethanol plants on a timely basis or on acceptable economic terms. Construction costs may increase to levels that would make a new plant too expensive to complete or unprofitable to operate. Additional financing may also be necessary to implement any expansion strategy, which may not be accessible or available on acceptable terms. New and more stringent environmental regulations could increase the operating costs and risks of new plants, which, in turn could discourage us from further expansion. In addition, failure to adequately manage the risks associated with additional ethanol investments could have a material adverse effect on our business.

Our ethanol plants may be adversely affected by technological advances and efforts to anticipate and employ such technological advances may prove unsuccessful.

The development and implementation of new technologies may result in a significant reduction in the costs of ethanol production. For instance, any technological advances in the efficiency or cost to produce ethanol from inexpensive cellulosic sources such as corn stalk, wheat, oat or barley straw could have an adverse effect on our ethanol plants, because our plants are designed to produce ethanol from corn, which is, by comparison, a raw material with other high value uses. We cannot predict when new technologies may become available, the rate of acceptance of new technologies by competitors or the costs associated with new technologies. In addition, advances in the development of alternatives to ethanol could significantly reduce demand for or eliminate the need for ethanol.

Any advances in technology which require significant unanticipated capital expenditures to remain competitive or which reduce demand or prices for ethanol would have a material adverse effect on the results of our ethanol operations.

In addition, alternative fuels, additives and oxygenates are continually under development. Alternative fuel additives that can replace ethanol may be developed, which may decrease the demand for ethanol. It is also possible that technological advances in engine and exhaust system design and performance could reduce the use of oxygenates, which would lower the demand for ethanol, and the results of our ethanol operations may be materially adversely affected.

The U.S. ethanol industry is highly dependent upon a myriad of federal and state legislation and regulation and any changes in legislation or regulation could materially and adversely affect our results of operations and financial position.

The Energy Independence and Security Act of 2007 (EISA) established RFS II, which modified the renewable fuel standard from prior legislation. EISA increased the amount of renewable fuel required to be blended into gasoline and required a minimum usage of corn-derived renewable fuels of 12.0 billion gallons in 2010, increasing annually by 600 million gallons to 15.0 billion gallons in 2015 through 2022, with no specified volume subsequent to 2022. The EPA has the authority to assign the mandated amounts of renewable fuels to be blended into transportation fuel to individual fuel blenders. RFS II has been a primary factor in the growth of ethanol usage. Over the past several years various pieces of legislation have been introduced to the U.S. Congress that were intended to reduce or eliminate ethanol blending requirements. To date, none of the bills have been successful but they are an indication of the continued effort to undermine the EISA. For example, on January 3, 2017, the Leave Ethanol Volumes at Existing Levels ("LEVEL") Act (H.R. 119) was introduced in the U.S. House of Representatives. The bill would freeze renewable fuel blending requirements under the RFS at 7.5 billion gallons per year, prohibit the sale of gasoline containing more than 10% ethanol, and revoke the EPA's approval of E15 blends. In addition, on January 31, 2017, a bill (H.R. 777) was introduced in the U.S. House of Representatives that would require the EPA and National Academies of Sciences to conduct a study on the implication of the use of mid-level ethanol blends. A mid-level ethanol blend is an ethanol gasoline blend containing 10-20% ethanol by volume, including E15 and E20, that is intended to be used in any conventional gasoline powered motor vehicle or non-road vehicle or engine. On March 2, 2017, a bill (H.R. 1315) was introduced in the U.S. House of Representatives that would limit the volume of ethanol in gasoline to 10%. On the same day, the RFS Elimination Act (H.R. 1314) was introduced in the U.S. House of Representatives. The bill would fully repeal the RFS.

Under EISA, the EPA has the authority to waive or modify the mandated RFS II requirements in whole or in part. In order to grant a waiver, the EPA administrator must determine in consultation with the Secretaries of Agriculture and Energy, that one of the following two conditions has been met: i) there is inadequate domestic renewable fuel supply or ii) implementation of the requirement would severely harm the economy or environment of a state, region or the country. In certain past years the EPA has taken action to reduce the mandated gallons called for under EISA for both conventional and advanced renewable fuels.

Pursuant to RFS II, if mandatory renewable fuel volumes are reduced by at least 20% for two consecutive years, the EPA is required to modify, or reset, statutory volumes through 2022. While conventional ethanol was maintained at 15 billion gallons, 2019 is the second consecutive year the total proposed RVOs are more than 20% below statutory volumes levels. Thus, the EPA Administrator directed his staff to initiate the reset rulemaking process and the EPA will modify statutory volumes through 2022 based upon the same factors used to set the post 2022 RVOs. These factors include environmental impact, domestic energy security, expected production, infrastructure, consumer costs, job creation, agriculture commodities, food prices and rural economic development.

Obligated parties use renewable identification numbers ("RINs") to show compliance with RFS-mandated volumes. RINs are attached to renewable fuels by producers and detached when the renewable fuel is blended with transportation fuel or traded in the open market. The market price of detached RINs affects the price of ethanol in certain markets and influences the purchasing decisions by obligated parties. As a result of fluctuations in RINs pricing, certain obligated parties have petitioned the EPA and filed court actions to change the point of obligation or to seek relief from their obligation. The EPA has granted small refiner waivers for 2016 and 2017 totaling approximately 2.6 billion gallons. This action has already led to reduced values for RINs and further action could decrease RIN values and ethanol pricing.

In March 2019, the EPA sent reform measures to the White House to control speculation in RIN values by barring trading from non-industry participants, publicizing large RIN positions, limiting the length of time a non-obligated party can hold RINs and increasing the compliance frequency to quarterly rather than annually. This could provide for further uncertainty in RIN values.

If the United States were to withdraw from or materially modify the North American Free Trade Agreement (“NAFTA”) or certain other international trade agreements, our business, financial condition and results of operations could be materially adversely affected. Ethanol and other products that we produce are sold into Canada, Mexico and other countries with trade agreements with the United States. If tariffs were raised on the foreign-sourced goods that lead to retaliatory actions, it could have material adverse effect on our business, financial condition and results of operations.

The inability to generate or obtain RINs could adversely affect our operating results. Virtually all of our ethanol is sold with RINs that are used by customers to comply with RFS II. If our production does not meet EPA requirements for RIN generation in the future, we would have to purchase RINs in the open market or sell our ethanol at substantially lower prices to adjust for the absence of RINs. The price of RINs varies based on many factors and cannot be predicted. Failure to obtain sufficient RINs or reliance on invalid RINs could subject us to fines and penalties imposed by the EPA.

Changes in corporate average fuel economy standards could adversely impact ethanol prices. Flexible fuel vehicles receive preferential treatment in meeting federally mandated corporate average fuel economy (“CAFE”) standards for automobiles manufactured by car makers. High blend ethanol fuels such as E-85 result in lower fuel efficiencies. Absent the CAFE preferences, car makers would not likely build flexible-fuel vehicles. Any change in CAFE preferences could reduce the growth of E-85 markets and result in lower ethanol prices.

Various studies have criticized the efficiency of ethanol, in general, and corn-based ethanol in particular, which could lead to the reduction or repeal of incentives and tariffs that promote the use and domestic production of ethanol or otherwise negatively impact public perception and acceptance of ethanol as an alternative fuel.

Although many trade groups, academics and governmental agencies have supported ethanol as a fuel additive that promotes a cleaner environment, others have criticized ethanol production as consuming considerably more energy and emitting more greenhouse gases than other biofuels and as potentially depleting water resources. Other studies have suggested that corn-based ethanol is less efficient than ethanol produced from switchgrass or wheat grain and that it negatively impacts consumers by causing prices for dairy, meat and other foodstuffs from livestock that consume corn to increase.

On February 22, 2019, the U.S. EPA published a notice in the Federal Register announcing a proposed consent decree that would require the agency to complete an anti-backsliding study on the RFS by March 30, 2020. A public comment period on the notice is open through March 25, 2019. According to information released by the EPA, the anti-backsliding study will consider whether the renewable fuel volumes required under the RFS by the Clean Air Act adversely impact air quality as a result of changes in vehicle and engine air pollutant emissions.

If these views gain acceptance, support for existing measures promoting use and domestic production of corn-based ethanol could decline, leading to reduction or repeal of these measures. These views could also negatively impact public perception of the ethanol industry and acceptance of ethanol as an alternative fuel.

Federal support of cellulosic ethanol may result in reduced incentives to corn-derived ethanol producers.

The American Recovery and Reinvestment Act of 2009 and EISA provide funding opportunities in support of cellulosic ethanol obtained from biomass sources such as switchgrass and poplar trees. The amended RFS mandates an increasing level of production of non-corn-derived biofuels. These federal policies may suggest

a long-term political preference for cellulosic processes using alternative feedstocks such as switchgrass, silage or wood chips. Cellulosic ethanol has a smaller carbon footprint than corn-derived ethanol, and is unlikely to divert foodstuff from the market. Several cellulosic ethanol plants are under development and there is a risk that cellulosic ethanol could displace corn ethanol. Our plants are designed as single-feedstock facilities, located in corn production areas with limited alternative feedstock nearby, and would require significant additional investment to convert to the production of cellulosic ethanol. The adoption of cellulosic ethanol as the preferred form of ethanol could have a significant adverse effect on our ethanol business.

Our ethanol business is affected by environmental and other regulations which could impede or prohibit our ability to successfully operate our plants.

Our ethanol production facilities are subject to extensive air, water and other environmental regulations. We have had to obtain numerous permits to construct and operate our plants. Regulatory agencies could impose conditions or other restrictions in the permits that are detrimental, or which increase our costs. More stringent federal or state environmental regulations could be adopted which could significantly increase our operating costs or require us to expend considerable resources.

Our ethanol plants emit various airborne pollutants as by-products of the ethanol production process, including carbon dioxide (a greenhouse gas). In 2007, the U.S. Supreme Court classified carbon dioxide as an air pollutant under the Clean Air Act in a case seeking to require the EPA to regulate carbon dioxide in vehicle emissions. In February 2010, the EPA released its final regulations on the Renewable Fuel Standard program. We believe our plants are grandfathered up to certain operating capacity, but recent plant expansion requires us to meet a 20% threshold reduction in greenhouse gas (GHG) emissions from a 2005 baseline measurement to produce ethanol eligible for the RFS II mandate. To further expand our plant capacity, we may be required to obtain additional permits, install advanced technology equipment, or reduce drying of certain amounts of distillers grains. We may also be required to install carbon dioxide mitigation equipment or take other steps in order to comply with future laws or regulations. Compliance with future laws or regulations of carbon dioxide, or if we choose to expand capacity at certain of our plants, compliance with then-current regulations of carbon dioxide, could be costly and may prevent us from operating our plants as profitably, which may have a negative impact on our financial performance. We also face the risk of ethanol production above our grandfathered capacity not qualifying for RINS if the plants do not meet certain emission requirements.

The California Air Resources Board ("CARB") has adopted a Low Carbon Fuel Standard ("LCFS") requiring a 10% reduction in GHG emissions from transportation fuels by 2020. An Indirect Land Use Charge is included in this lifecycle GHG emission calculation. After a series of rulings that temporarily prevented CARB from enforcing these regulations, the State of California Office of Administrative Law approved the LCFS on November 26, 2012 and revised LCFS regulations took effect in January 2013. This standard could have an adverse impact on the market for corn-based ethanol in California if corn-based ethanol fails to achieve lifecycle GHG emission reductions. This could have a negative impact on our financial performance.

Our ethanol business may become subject to various environmental and health and safety and property damage claims and liabilities.

Operation of our ethanol business exposes the business to the risk of environmental and health and safety claims and property damage claims, such as failure to comply with environmental regulations. These types of claims could also be made against our ethanol business based upon the acts or omissions of other persons. Serious claims could have a material negative impact on our results of operations, financial position and future cash flows.

Our business is not significantly diversified.

Our financial results depend heavily on our ability to operate our ethanol plants profitably. Our lack of significant diversification could have a material negative impact on our results of operations, financial position and future cash flows should our ethanol plants operate unprofitably.

We may have commitments to produce and sell ethanol.

We may, at times, sell our products with forward contracts. If we are unable to produce the products due to economic conditions, business interruption, or other factors, we may incur additional costs or have to obtain commodities at unfavorable prices to meet our contractual commitments. This could have a material adverse effect on our results of operations.

Our revenue from the sale of distillers grains depends upon its continued market acceptance as an animal feed.

Distillers grains is a co-product from the fermentation of corn to produce ethanol. Antibiotics may be used during the fermentation process to control bacterial contamination; therefore antibiotics may be present in small quantities in distillers grains marketed as animal feed. The U. S. Food and Drug Administration's Center for Veterinary Medicine has expressed concern about potential animal and human health hazards from the use of distillers grains as an animal feed due to the possibility of antibiotic residues. If the public became concerned about the impact of distillers grains in the food supply or as an acceptable animal feed, the market for distillers grains could be negatively impacted, which would have a negative impact on our results of operations. We may not be able to obtain a suitable replacement for antibiotics, should this be required, which would also negatively impact the market for distillers grains.

An estimated 29% of distillers grains produced in the United States were exported in 2018. The price of distillers grains has benefitted from the exports of the product. In recent years, certain countries have refused to import U.S. distillers grains for a variety of reasons. If export shipments are rejected or delayed, the market price for distillers grains would be negatively impacted, which would have a negative impact on our ethanol results of operations.

At certain of our plants, we extract and sell non-food grade corn oil immediately prior to the production of distillers grains. Several studies are attempting to determine whether non-food grade corn oil extraction may impact the nutritional value of the resulting distillers grains. If it is determined that non-food grade corn oil extraction adversely impacts the nutritional energy content of distillers grains, the value of the distillers grains we sell may be negatively impacted, which would have a negative impact on our results of operations.

We face significant competition in the ethanol industry.

We face significant competition for new ethanol investment opportunities. There are varied enterprises seeking to participate in the ethanol industry. Some enterprises provide financial and management support similar to our business model. Other enterprises seek to acquire or develop plants which they will directly own and operate. Many of our competitors are larger and have greater financial resources and name recognition than we do. We must compete for investment opportunities based on our strategy of supporting and enhancing local development of ethanol plant opportunities. We may not be successful in competing for investment opportunities based on our strategy.

The ethanol industry is primarily comprised of entities that engage exclusively in ethanol production and large integrated grain companies that produce ethanol along with their base grain business. Several large oil companies have entered the ethanol production market. If these companies increase their ethanol plant ownership or if other oil companies seek to engage in direct ethanol production, there would be less of a need

to purchase ethanol from independent producers such as our ethanol plants. No assurance can be given that our ethanol plants will be able to compete successfully or that competition from larger companies with greater financial resources will not have a materially adverse impact on the results of our ethanol operations.

We may face competition from foreign producers.

There is a risk of foreign competition in the ethanol industry. Brazil is presently the second largest producer of ethanol in the world. Brazil's ethanol production is sugarcane based, and, depending on feedstock prices, may be cheaper to produce than corn-derived ethanol. Under the RFS, certain parties were obligated to meet an advanced biofuel standard. In recent years, sugarcane based ethanol imported from Brazil has been one of the most economical means for obligated parties to comply with this standard.

If significant additional foreign ethanol production capacity is created, such facilities could create excess supplies of ethanol, which may result in lower prices of ethanol. In addition, foreign ethanol producers may be able to produce ethanol at costs lower than ours. These risks could have significant adverse effects on our financial performance.

We are exposed to credit risk from our sales of ethanol and distillers grains to customers.

The inability of a customer to make payments to us for our accounts receivable may cause us to experience losses and may adversely impact our liquidity and our ability to make our payments when due.

We may not be able to hire and retain qualified personnel to operate our ethanol plants.

Our ability to attract and retain competent personnel has a significant impact on operating efficiencies and plant profitability. Competition for key plant employees in the ethanol industry can be intense, and we may not be able to attract and retain qualified employees. Failure to do so could have a negative impact on our financial results at individual plants.

Our plants depend on an uninterrupted supply of energy and water to operate. Unforeseen plant shutdowns could harm our business.

Our plants require a significant and uninterrupted supply of natural gas, electricity and water to operate. We generally rely on third parties to provide these resources. If there is an interruption in the supply of energy or water for any reason, such as supply, delivery or mechanical problems and we are unable to secure an adequate alternative supply to sustain plant operations, we may be required to stop production. A production halt for an extended period of time could result in material losses.

Potential business disruption from factors outside our control, including natural disasters, severe weather conditions, accidents, strikes, unexpected equipment failures and unforeseen plant shutdowns, could adversely affect our cash flow and operating results.

The debt agreements for certain of the ethanol plants limit, or otherwise restrict the amount of dividends and other payments the ethanol subsidiaries can transfer to their members.

We are dependent on dividends from our ethanol subsidiaries to generate cash flow. Presently our unconsolidated ethanol subsidiary has debt agreements that limit payments to members. Therefore, this company cannot distribute all of the cash it generates to its members. Furthermore, we may not be able to use the excess cash flow from one subsidiary to fund corporate needs or needs of another operating ethanol subsidiary.

We rely on information technology in our operations and financial reporting and any material failure, inadequacy, interruption or security breach of that technology could harm our ability to efficiently operate our business and report our financial results accurately and timely.

We rely heavily on information technology systems across our operations, including for management of inventory, purchase orders, production, invoices, shipping, accounting and various other processes and transactions. Our ability to effectively manage our business, coordinate the production, distribution and sale of our products and ensure the timely and accurate recording and disclosure of financial information depends significantly on the reliability and capacity of these systems. The failure of these systems to operate effectively, problems with transitioning to upgraded or replacement systems, or a breach in security of these systems through a cyber-attack or otherwise could cause delays in product sales, reduced efficiency of our operations and delays in reporting our financial results. Significant capital investments could be required to remediate any such problem. Security breaches of employee information or other confidential or proprietary data could also adversely impact our reputation, and could result in litigation against us or the imposition of penalties.

We are exposed to potential business disruption from factors outside our control, including natural disasters, severe weather conditions, accidents, and unforeseen operational failures any of which could negatively affect our transportation operations and could adversely affect our cash flows and operating results.

Potential business disruption in available transportation due to natural disasters, severe weather conditions, significant track damage resulting from a train derailment, strikes or other interruptions by our transportation providers could result in delays in procuring and supplying raw materials to our ethanol facilities, or transporting ethanol and distillers grains to our customers. Such business disruptions may result in our inability to meet customer demand or contract delivery requirements, as well as the potential loss of customers.

Rail cars used to transport ethanol may need to be modified or replaced to meet proposed rail safety regulations.

The leased rail cars we use to transport ethanol to market will need to be retrofitted or replaced as the Enhanced Tank Car Standards and Operation Controls for High-Hazard Flammable Trains adopted by the U.S. Department of Transportation ("DOT") imposes an enhanced tank car standard known as the DOT specification 117 and establishes a schedule to retrofit or replace older tank cars that carry crude oil and ethanol. The rule also establishes braking standards intended to reduce the severity of accidents and new operational protocols. This could lead to increased rail car lease costs and delays in transportation of ethanol if rail cars are out of service for extended periods of time.

We operate in a capital intensive industry. Limitations on external financing could adversely affect our financial performance.

We may need to incur additional financing to fund growth of our business or in times of increasing liquidity requirements (such as increases in raw material costs). Bankruptcy filings by several ethanol companies in past years and capital market volatility has reduced available capital for the ethanol industry. Any delays in obtaining additional financing, or our inability to do so, could have a material adverse impact on our financial results.

Risks Related to our Refined Coal Operations

Our refined coal investment is subject to various risks and uncertainties.

We purchased a company that produces refined coal that we believe qualifies to earn tax credits under IRC Section 45 through November 2021. Our ability to generate returns and avoid write-offs in connection with this investment is subject to various risks and uncertainties. These include, but are not limited to, the risks and uncertainties as set forth below.

Availability of the tax credits under IRC Section 45.

Our ability to claim tax credits under IRC Section 45 depends upon the operation which we have purchased satisfying certain ongoing conditions set forth in IRC Section 45. Furthermore, the tax credits under IRC Section 45 could be reduced or completely eliminated as a result of changes in income tax laws and/or regulations.

The IRS could ultimately determine that the refined coal facility we purchased and/or its operations have not satisfied, or have not continued to satisfy, the conditions set forth in IRC Section 45. As our refined coal operation is expected to generate pre-tax losses, the unavailability of the tax credits for any reason could have a material impact on our results of operations.

IRC Section 45 phase out provisions.

IRC Section 45 contains phase out provisions based upon the market price of coal such that, if the price of coal rises to specified levels, we could lose some or all of the tax credits we expect to receive from this operation.

The refined coal operation depends on one customer.

The refined coal operation receives tax credits by selling its refined coal to an unrelated party. The unrelated party is not obligated to continue purchasing refined coal from us. Our user of refined coal could convert its fuel source to natural gas, oil or some other source instead of coal depending on the price of natural gas, oil or other sources relative to that of coal. If the unrelated party ceases to purchase refined coal from us, we would attempt to move our refined coal plant to a different location, which could require us to invest additional capital, or to find a different user to purchase our refined coal. In addition, we may not be able to find a suitable location to move our refined coal plant to or find a different user to purchase our refined coal in a timely manner. Market demand for coal may also decline as a result of an economic slowdown. Sustained low natural gas prices may also cause users of coal to phase out or close existing coal using operations. If users of coal burn less coal or eliminate the use of coal there would be less need for our product. A reduction or cessation of refined coal sales could have a material impact on our results of operations.

Environmental concerns regarding coal could lead to reduced or suspended refined coal operations.

Environmental concerns about greenhouse gases, toxic wastewater discharges and the potential hazardous nature of coal combustion waste could lead to regulations that discourage the burning of coal. Such regulations could mandate that electric power generating companies purchase a minimum amount of power from renewable energy sources such as wind, hydroelectric, solar and geothermal. This could result in utilities burning less coal, which could have a material impact on our results of operations.

The refined coal operation in which we have invested and the by-products from such operations may result in environmental and product liability claims and environmental compliance costs.

The construction and operation of refined coal operations are subject to Federal, state and local laws, regulations and potential liabilities arising under or relating to the protection or preservation of the

environment, natural resources and human health and safety. Such laws and regulations generally require the operations and/or the utilities at which the operations are located to obtain and comply with various environmental registrations, licenses, permits, inspections and other approvals. Such laws and regulations also impose liability, without regard to fault or the legality of a party's conduct, on certain entities that are considered to have contributed to, or are otherwise involved in, the release or threatened release of hazardous substances into the environment. Such hazardous substances could be released as a result of burning refined coal in a number of ways, including air emissions, waste water, and by-products such as fly ash. One party may, under certain circumstances, be required to bear more than its share or the entire share of investigation and cleanup costs at a site if payments or participation cannot be obtained from other responsible parties. We may be exposed to the risk of becoming liable for environmental damage we may have had little, if any, involvement in creating. Such risk remains even after production ceases at an operation to the extent the environmental damage can be traced to the types of chemicals or compounds used or operations conducted in connection with the use of refined coal.

No assurances can be given that contractual arrangements and precautions taken to ensure assumption of these risks by facility owners or operators will result in that facility owner or operator accepting full responsibility for any environmental damage. It is also not uncommon for private claims by third parties alleging contamination to also include claims for personal injury, property damage, diminution of property or similar claims. Furthermore, many environmental, health and safety laws authorize citizen suits, permitting third parties to make claims for violations of laws or permits and force compliance. Our insurance may not cover all environmental risk and costs or may not provide sufficient coverage in the event of an environmental claim. If significant uninsured losses arise from environmental damage or product liability claims, or if the costs of environmental compliance increase for any reason, our results of operations and financial condition could be adversely affected.

We rely on a third party to operate the refined coal facility.

We rely on an unrelated third party to operate the refined coal plant. Should the third party fail to perform or underperform in the operation, management or regulatory compliance of the facility, our results of operations and financial condition could be adversely affected as we are not experienced in operating a refined coal facility.

We will have to generate taxable income to utilize the Section 45 federal production tax credits.

If we do not generate sufficient taxable income to utilize the tax credits earned by our refined coal operation, we could incur write-offs of the related tax attributes which could adversely affect our results of operations and financial condition. In addition, this could adversely reduce our liquidity reserves as we expect to incur operating losses sustained by the refined coal operation.

Risks Related to our eSteam investment

eSteam may not be a commercially viable technology.

During fiscal year 2013, we invested in eSteam, a new technology utilizing steam to extract deep heavy oil. Cumulatively, we have spent approximately \$2.0 million on this patented but unproven technology. To date, we have not tested or proven the viability of the technology. In addition, low energy and crude oil prices may make eSteam technology less attractive to potential users. If we cannot demonstrate that the technology is commercially feasible, we may incur additional losses.

eSteam testing methods and results are not known.

We do not have specific testing methodologies or specifications developed for testing the viability of the eSteam technology. The actual eSteam testing process could result in injury to others, and property and other damages that could expose us to claims for damages from unrelated parties.

Our eSteam technology may be subject to patent challenges.

If our patents of the eSteam technology are challenged, we could be required to spend considerable time and resources defending our patents.

Operations utilizing our eSteam technology may be subject to stringent environmental regulations.

Use of the eSteam technology will require significant amounts of water and energy. If we or third parties are unable to obtain the proper permits and sources of water and energy, then we may not be able to commercialize the new technology, and thus, generate any revenue from our investment.

Operations utilizing our eSteam technology may cause environmental damage.

When testing and operating the eSteam technology, we may cause environmental damage, as we would be injecting water and other fluids into the ground to generate underground steam in order to extract oil. We could be subject to significant penalties and fines if we were to cause environmental damage.

Risks Related to REX and non-industry specific matters.

We have concentrations of cash deposits at financial institutions that exceed federal insurance limits.

We generally have cash deposits that exceed federal insurance limits. Should the financial institutions we deposit our cash in experience insolvency or other financial difficulty, our access to cash deposits could be limited. In extreme cases, we could lose our cash deposits entirely. This would negatively impact our liquidity and results of operations.

We may fail to realize the anticipated benefits of mergers, acquisitions, or other investments.

We intend to continue seeking growth opportunities. Acquisitions and similar transactions involve many risks that could harm our business, which include:

- The anticipated benefits of these transactions may not be fully realized, or take longer to realize than expected,
- Future acquisitions could result in operating losses or loss of investment, and
- Future acquisitions may involve incurring debt to complete these transactions, which could have a material adverse effect on our financial condition.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

The information required by this Item 2 is set forth in Item 1 of this report under “Ethanol Investments” and “Facilities” and is incorporated herein by reference.

Item 3. Legal Proceedings

We are, from time to time, involved in various legal proceedings incidental to the conduct of our business. We believe that any current proceedings will not have a material adverse effect on our financial condition or results of operations.

Executive Officers of the Company

Set forth below is certain information about each of our executive officers.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Stuart Rose	64	Executive Chairman of the Board*
Zafar Rizvi	69	Chief Executive Officer and President*
Douglas Bruggeman	58	Vice President-Finance, Chief Financial Officer and Treasurer
Edward Kress	69	Secretary*

*Also serves as a director.

Stuart Rose was elected our Executive Chairman of the Board in 2015. Mr. Rose had served as our Chairman of the Board and Chief Executive Officer since our incorporation in 1984 as a holding company. Prior to 1984, Mr. Rose was Chairman of the Board and Chief Executive Officer of Rex Radio and Television, Inc., which he founded in 1980 to acquire the stock of a corporation which operated four retail stores.

Zafar Rizvi was elected Chief Executive Officer in 2015. Mr. Rizvi has been our President and Chief Operating Officer since 2010, was Vice President from 2006 to 2010. From 1991 to 2006, Mr. Rizvi was our Vice President – Loss Prevention.

Douglas Bruggeman has been our Vice President–Finance and Treasurer since 1989 and was elected Chief Financial Officer in 2003. From 1987 to 1989, Mr. Bruggeman was our Manager of Corporate Accounting. Mr. Bruggeman was employed with the accounting firm of Ernst & Young prior to joining us in 1986.

Edward Kress has been our Secretary since 1984. Mr. Kress has been a partner of the law firm of Dinsmore & Shohl LLP (formerly Chernesky, Heyman & Kress P.L.L.), our legal counsel, since 1988. Mr. Kress has practiced law in Dayton, Ohio since 1974.

Item 4. Mine Safety Disclosures

Not Applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

SHAREHOLDER INFORMATION

Our common stock is traded on the New York Stock Exchange under the symbol REX.

As of March 28, 2019, there were 85 holders of record of our common stock, including shares held in nominee or street name by brokers.

Dividend Policy

We did not pay dividends in the current or prior years. We (including our consolidated subsidiaries) currently have no restrictions on the payment of dividends. Our minority owned ethanol subsidiary has restrictions on its ability to pay dividends to members (including REX). Our consolidated subsidiary, One Earth, paid dividends to REX of approximately \$13.4 million, \$10.2 million and \$10.2 million during fiscal years 2018, 2017 and 2016, respectively. Our consolidated subsidiary, NuGen, paid dividends to REX of approximately \$7.4 million and \$15.7 million during fiscal years 2017 and 2016, respectively. NuGen paid no dividends to REX during fiscal year 2018.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs (1)
November 1-30, 2018	—	\$ —	—	402,620
December 1-31, 2018	52,559	\$ 65.13	52,559	350,061
January 1-31, 2019	200	\$ 67.03	200	349,861
Total	<u>52,759</u>	<u>\$ 65.14</u>	<u>52,759</u>	<u>349,861</u>

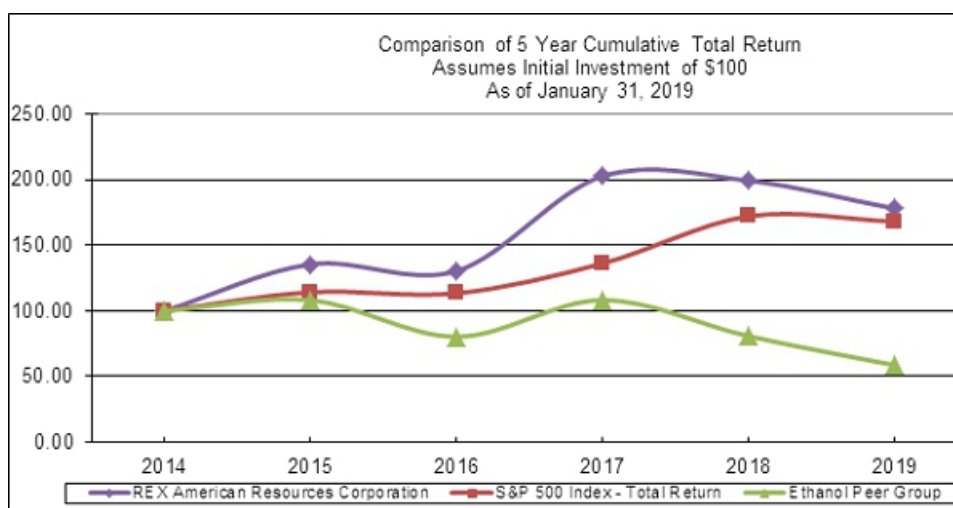
- (1) On March 20, 2018, our Board of Directors increased our share repurchase authorization by an additional 500,000 shares. At January 31, 2019, a total of 349,861 shares remained available to purchase under this authorization.

Equity Compensation Plans

Refer to Item 12 – Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters for information regarding shares authorized for issuance under equity compensation plans.

Performance Graph

The following graph compares the yearly percentage change in the cumulative total shareholder return on our Common Stock against the cumulative total return of the S&P 500 Stock Index and a peer group comprised of Pacific Ethanol, Inc. and Green Plains, Inc. for the period commencing January 31, 2014 and ended January 31, 2019. The graph assumes an investment of \$100 in our Common Stock and each index on January 31, 2014 and reinvestment of all dividends.



Item 6. Selected Financial Data

The following statements of operations and balance sheet data have been derived from our consolidated financial statements and should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and the Consolidated Financial Statements and related Notes. See Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations for a discussion of net sales and revenue and gross profit, income from ethanol investments, the benefit/provision for income taxes and the refined coal acquisition. These items have fluctuated significantly in recent years and may affect comparability of years.

Five Year Financial Summary

(In Thousands, Except Per Share Amounts)

Years Ended January 31,	2019	2018	2017	2016	2015
Statement of Operations Data:					
Net sales and revenue	\$ 486,671	\$ 452,586	\$ 453,799	\$ 436,488	\$ 572,230
Gross profit	30,215	44,161	71,039	50,834	141,939
Selling, general and administrative expenses	(20,551)	(24,060)	(21,388)	(19,813)	(19,422)
Equity in income of unconsolidated ethanol affiliates	1,536	3,232	6,144	8,984	32,229
(Loss) gain on sale of investment	—	(13)	192	10,385	—
Benefit (provision) for income taxes	22,922	19,519	(17,393)	(14,108)	(49,649)
Net income attributable to REX common shareholders	31,645	39,706	32,333	31,436	87,337
Diluted net income per share attributable to REX common shareholders	\$ 4.91	\$ 6.02	\$ 4.91	\$ 4.30	\$ 10.76

January 31,	2019	2018	2017	2016	2015
Balance Sheet Data:					
Cash and cash equivalents	\$ 188,531	\$ 190,988	\$ 188,576	\$ 135,765	\$ 137,697
Current assets	250,621	239,034	226,517	179,360	175,745
Property and equipment – net	182,521	197,827	182,761	189,976	194,447
Deferred taxes - long term liability	4,185	21,706	41,135	38,304	42,768
Noncontrolling interests	52,334	50,434	47,839	44,496	42,993
Total REX shareholders' equity	\$ 392,937	\$ 381,492	\$ 340,435	\$ 311,263	\$ 349,971

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

We have been an investor in ethanol production facilities beginning in 2006 and a refined coal production facility in 2017. We currently have equity investments in three ethanol production entities, two of which are majority ownership interests, and a majority ownership in one refined coal production entity. We may make additional alternative energy investments in the future.

Our ethanol operations are highly dependent on commodity prices, especially prices for corn, ethanol, distillers grains, non-food grade corn oil and natural gas. As a result of price volatility for these commodities, our operating results can fluctuate substantially. The price and availability of corn is subject to significant fluctuations depending upon a number of factors that affect commodity prices in general, including crop conditions, weather, federal policy and foreign trade. Because the market price of ethanol is not always directly related to corn prices, at times ethanol prices may not follow movements in corn prices and, in an environment of higher corn prices or lower ethanol prices, reduce the overall margin structure at the plants. As a result, at times, we may operate our plants at negative or minimally positive operating margins.

We expect our ethanol plants to produce approximately 2.8 gallons of denatured ethanol for each bushel of grain processed in the production cycle. We refer to the actual gallons of denatured ethanol produced per bushel of grain processed as the realized yield. We refer to the difference between the price per gallon of ethanol and the price per bushel of grain (divided by the realized yield) as the "crush spread." Should the crush spread decline, it is possible that our ethanol plants will generate operating results that do not provide adequate cash flows for sustained periods of time. In such cases, production at the ethanol plants may be reduced or stopped altogether in order to minimize variable costs at individual plants.

We attempt to manage the risk related to the volatility of commodity prices by utilizing forward grain purchase, forward ethanol, distillers grains and non-food grade corn oil sale contracts and commodity futures agreements as management deems appropriate. We attempt to match quantities of these sales contracts with an appropriate quantity of grain purchase contracts over a given period of time when we can obtain an adequate gross margin resulting from the crush spread inherent in the contracts we have executed. However, the market for future ethanol sales contracts generally lags the spot market with respect to ethanol price. Consequently, we generally execute fixed price contracts for no more than four months into the future at any given time and we may lock in our corn or ethanol price without having a corresponding locked in ethanol or corn price for short durations of time. As a result of the relatively short period of time our fixed price contracts cover, we generally cannot predict the future movements in the crush spread for more than four months; thus, we are unable to predict the likelihood or amounts of future income or loss from the operations of our ethanol facilities. We utilize derivative financial instruments, primarily exchange traded commodity future contracts, in conjunction with certain of our grain procurement activities.

Commodity prices in fiscal year 2018 were subject to significant volatility. For fiscal year 2018, the average Chicago Board of Trade (“CBOT”) near-month corn price ranged from a low of approximately \$3.40 per bushel in July 2018 to a high of approximately \$4.08 per bushel in May 2018. Corn prices were impacted throughout the year from consecutive strong corn harvests in 2017 and 2018. Ethanol prices had significant fluctuations ranging from a low of approximately \$1.20 per gallon in November 2018 to a high of approximately \$1.53 per gallon in March 2018. Ethanol prices were influenced by many factors throughout the year including domestic demand, record exports and increases in U.S. ethanol production. Ethanol prices in 2018 were negatively impacted, in part, by increased small refiner waivers granted by the Environmental Protection Agency (“EPA”) and the resulting reductions to the Renewable Fuel Standard (“RFS”) obligations and ethanol demand.

On August 10, 2017, we, through a 95.35% owned subsidiary, purchased the entire ownership interest of an entity that owns a refined coal facility for approximately \$12.0 million. We began operating the refined coal facility immediately after the acquisition. We expect that the revenues from the sale of refined coal produced in the facility will be subsidized by federal production tax credits through November 2021, subject to meeting qualified emissions reductions and other requirements as governed by Section 45 of the Internal Revenue Code. In order to maintain compliance with Section 45 of the Internal Revenue Code, we are required to test every six months, through an independent laboratory, the effectiveness of our process with respect to emissions reductions. Annually, the IRS publishes the amount of federal income tax credit earned per ton of refined coal produced and sold for a given calendar year, which for 2018 is \$7.03 per ton.

Net income attributable to REX common shareholders was approximately \$31.6 million in fiscal year 2018 compared to approximately \$39.7 million in fiscal year 2017. The current year benefitted from reductions in our effective tax rate resulting from the impact of federal production tax credits associated with our refined coal operations and from the impact of research and experimentation credits associated with our ethanol and by-products operations. Fiscal year 2017 benefitted from the impact of tax reform legislation as we remeasured our deferred tax liabilities at a significantly lower tax rate. Gross profit in fiscal year 2018 was significantly lower compared to fiscal year 2017, primarily a result of lower ethanol crush spreads and the impact of our refined coal facility which generated a gross loss for a full year of operations in fiscal year 2018 compared to a partial year of operations in fiscal year 2017. Due to the inherent volatility of commodity prices within the ethanol industry, the uncertainty regarding future refined coal production and associated financial results, we cannot predict the likelihood of future operating results being similar to the fiscal year 2018 results.

We plan to seek and evaluate various investment opportunities including energy related, agricultural or other ventures we believe fit our investment criteria. We can make no assurances that we will be successful in our efforts to find such opportunities.

Through a wholly owned subsidiary REX I.P., LLC, we entered, during fiscal year 2013, into a joint venture to file and defend patents for technology relating to heavy oil and oil sands production methods, and to attempt to commercially exploit the technology to generate license fees, royalty income and development opportunities. The patented technology is an enhanced method of heavy oil recovery involving zero emissions downhole steam generation. We own 60% and Hytken owns 40% of the entity named Future Energy, LLC, an Ohio limited liability company. Future Energy is managed by a board of three managers, two appointed by us and one by Hytken.

We agreed to fund direct patent expenses relating to patent applications and defense, annual annuity fees and maintenance on a country by country basis, with the right to terminate funding and transfer related patent rights to Hytken. We may also fund, through loans, all costs relating to new intellectual property, consultants, and future research and development, pilot field tests and equipment purchases for commercialization stage of the patents. To date, we have paid approximately \$2.0 million to purchase our ownership interest and fund patent and other expenses. We have not tested or proven the commercial feasibility of the technology.

Ethanol Investments

In fiscal year 2006, we entered the ethanol industry by investing in several entities organized to construct and, subsequently operate, ethanol producing plants. We are invested in three entities as of January 31, 2019, utilizing equity investments. The following table is a summary of our ethanol investments at January 31, 2019 (gallons in millions):

Entity	Trailing 12 Months Ethanol Gallons Shipped	REX's Current Ownership Interest	Current Effective Ownership of Trailing 12 Months Ethanol Gallons Shipped
One Earth Energy, LLC	141.9	75.1%	106.6
NuGen Energy, LLC	143.9	99.5%	143.2
Big River Resources, LLC:			
Big River Resources W Burlington, LLC	109.8	10.3%	11.3
Big River Resources Galva, LLC	128.8	10.3%	13.3
Big River United Energy, LLC	131.7	5.7%	7.5
Big River Resources Boyceville, LLC	58.3	10.3%	6.0
Total	714.4		287.9

Results of Operations

For a detailed analysis of period to period changes, see the segment discussion that follows this section as that discussion reflects how management views and monitors our business.

Comparison of Fiscal Years 2018 and 2017 (Consolidated Results)

Net Sales and Revenue – Net sales and revenue in fiscal year 2018 were approximately \$486.7 million, a 7.5% increase from approximately \$452.6 million in fiscal year 2017. The increase was primarily caused by higher sales in our ethanol and by-products segment of approximately \$33.7 million.

Gross Profit – Gross profit was approximately \$30.2 million in fiscal year 2018, or 6.2% of net sales and revenue, versus approximately \$44.2 million in fiscal year 2017 or 9.8% of net sales and revenue. Gross profit for fiscal year 2018 decreased by approximately \$7.7 million compared to fiscal year 2017 as a result of operations in the ethanol and by-products segment and by approximately \$6.3 million as a result of operations in the refined coal segment.

Selling, General and Administrative Expenses – Selling, general and administrative expenses for fiscal year 2018 were approximately \$20.6 million (4.2% of net sales and revenue), a decrease of approximately \$3.5 million or 14.6% from approximately \$24.1 million (5.3% of net sales and revenue) for fiscal year 2017. A majority of the decrease results from lower incentive compensation expense associated with lower profitability levels in fiscal year 2018 compared to fiscal year 2017 as well as the modification of our executive compensation program to include a one-time cumulative earnings adjustment for fiscal year 2018. The decrease was also related to professional fees and commission expense associated with the refined coal acquisition, which were lower in fiscal year 2018 compared to fiscal year 2017.

Equity in Income of Unconsolidated Ethanol Affiliates – During fiscal years 2018 and 2017, we recognized income of approximately \$1.5 million and \$3.2 million, respectively, from our equity investment in Big River, which is included in our ethanol and by-products segment results. Income recognized in fiscal year 2017 was

reduced by approximately \$0.8 million as a result of an impairment charge Big River incurred. Our investment in Big River, which has interests in four ethanol production plants, has an effective ownership of ethanol gallons shipped in the trailing twelve months ended January 31, 2019 of approximately 370 million gallons. The decline in income from fiscal year 2017 is reflective of industry conditions.

We expect the operating experience of Big River to be generally consistent with the trends in crush spread margins described in the “Overview” section as Big River’s results are dependent on the same key drivers as our other ethanol investments (ethanol, corn, dried distillers grains and natural gas pricing). Due to the inherent volatility of commodity prices within the ethanol industry, we cannot predict the likelihood of future operating results from Big River being similar to the fiscal year 2018 results.

Interest and Other Income – Interest and other income for fiscal year 2018 was approximately \$3.4 million compared to approximately \$2.1 million for fiscal year 2017. Interest income has increased as yields on our excess cash have improved compared to fiscal year 2017. Fiscal year 2017 income includes federal grants of approximately \$0.7 million.

Income Before Income Taxes – As a result of the foregoing, income before income taxes was approximately \$14.6 million for fiscal year 2018 versus approximately \$25.4 million for fiscal year 2017.

Provision for Income Taxes – Our effective tax rate was a benefit of 157.1% and 76.9% for fiscal years 2018 and 2017, respectively. Our effective rate is impacted by the noncontrolling interests of the companies we consolidate, as we recognize 100% of their income or loss before income taxes and noncontrolling interests. However, we only provide an income tax provision or benefit for our portion of the subsidiaries’ income or loss with a noncontrolling interest. Our effective tax rate decreased by 145.2% in fiscal year 2018 (approximately \$21.2 million) and by 45.4% in fiscal year 2017 (approximately \$11.5 million) as a result of federal production tax credits earned by our refined coal facility. The amount of these credits earned in future periods will vary with refined coal production levels. During fiscal year 2018, our effective tax rate decreased by 77.8% (approximately \$11.4 million) as a result of research and experimentation credits earned by our ethanol plants over a multi-year period. The amount of these credits earned in future periods will vary depending on the level of qualifying research expenditures at our ethanol plants. Primarily related to the research and experimentation credits, the provision for uncertain tax positions increased our effective tax rate by 47.1% (approximately \$6.9 million) in fiscal year 2018. The Tax Cuts and Jobs Act of 2017 (“Tax Act”) reduced the federal income tax rate on corporations from 35% to 21%, which resulted in a benefit of 56.6% (approximately \$14.4 million) to our effective tax rate in fiscal year 2017 as our deferred tax liabilities were remeasured at the lower federal income tax rate.

Net Income – As a result of the foregoing, net income was approximately \$37.5 million for fiscal year 2018 versus approximately \$44.9 million for fiscal year 2017.

Noncontrolling Interests – Income attributable to noncontrolling interests was approximately \$5.9 million and \$5.2 million during fiscal years 2018 and 2017, respectively, and represents the other owners’ share of the income or loss of NuGen, One Earth, the refined coal entity and Future Energy. Income attributable to noncontrolling interests of One Earth and NuGen were approximately \$5.8 million and \$0.1 million, respectively, during fiscal year 2018 and were approximately \$5.6 million and \$0.1 million, respectively, during fiscal year 2017. The loss attributable to noncontrolling interests of the refined coal entity was approximately \$0.7 million and approximately \$0.5 million during fiscal years 2018 and 2017, respectively. We do not expect to recover any portion of the noncontrolling interests holder’s share of prior Future Energy losses, thus, we recognized approximately \$0.7 million of expense in fiscal year 2018.

Net Income Attributable to REX Common Shareholders – As a result of the foregoing, net income attributable to REX common shareholders was approximately \$31.6 million for fiscal year 2018 compared to \$39.7 million for fiscal year 2017.

Business Segment Results

We have two reportable segments, i) ethanol and by-products and ii) refined coal. In fiscal year 2017, we began reporting the results of our refined coal operation as a new segment as a result of the August 10, 2017 acquisition of an entity that operates a refined coal facility. Prior to the acquisition, we had one reportable segment, ethanol.

The following sections discuss the results of operations for each of our business segments and corporate and other. As discussed in Note 16, our chief operating decision maker (as defined by Accounting Standards Codification (“ASC”) 280, “*Segment Reporting*” (“ASC 280”) evaluates the operating performance of our business segments using net income attributable to REX common shareholders. The following tables summarize segment and other results and assets (amounts in thousands):

Net sales and revenue:	Fiscal Year	
	2018	2017
Ethanol and by-products	\$ 485,885	\$ 452,153
Refined coal ¹	786	433
Total net sales and revenue	\$ 486,671	\$ 452,586

Segment gross profit (loss):

Ethanol and by-products	\$ 43,856	\$ 51,509
Refined coal	(13,641)	(7,348)
Total gross profit	\$ 30,215	\$ 44,161

Income (loss) before income taxes:

Ethanol and by-products	\$ 31,545	\$ 38,352
Refined coal	(15,204)	(10,021)
Corporate and other	(1,753)	(2,938)
Total income before income taxes	\$ 14,588	\$ 25,393

Benefit (provision) for income taxes:

Ethanol and by-products	\$ (2,343)	\$ 3,245
Refined coal	24,674	15,168
Corporate and other	591	1,106
Total benefit for income taxes	\$ 22,922	\$ 19,519

<u>Segment profit (loss):</u>	<u>Fiscal Year</u>	
	<u>2018</u>	<u>2017</u>
Ethanol and by-products	\$ 23,346	\$ 35,880
Refined coal	10,148	5,628
Corporate and other	(1,849)	(1,802)
Net income attributable to REX common shareholders	<u>\$ 31,645</u>	<u>\$ 39,706</u>

¹ We record sales in the refined coal segment net of the cost of coal as we purchase the coal feedstock from the customer to which refined coal is sold.

Ethanol and by-products Segment

The ethanol and by-products segment includes the consolidated financial results of One Earth and NuGen, our equity investment in Big River and certain administrative expenses. The following table summarizes selected data from One Earth and NuGen:

	<u>Fiscal Year</u>	
	<u>2018</u>	<u>2017</u>
Average selling price per gallon of ethanol	\$ 1.29	\$ 1.40
Gallons of ethanol sold (in millions)	285.8	256.0
Average selling price per ton of dried distillers grains	\$ 142.20	\$ 105.89
Tons of dried distillers grains sold	600,689	596,099
Average selling price per pound of non-food grade corn oil	\$ 0.25	\$ 0.29
Pounds of non-food grade corn oil sold (in millions)	81,758	73,817
Average selling price per ton of modified distillers grains	\$ 59.42	\$ 45.87
Tons of modified distillers grains sold	201,133	185,848
Average cost per bushel of grain	\$ 3.46	\$ 3.35
Average cost of natural gas (per mmbtu)	\$ 3.33	\$ 3.75

The following table summarizes sales from One Earth and NuGen, by product group (amounts in thousands):

<u>Product or Service Category</u>	<u>Fiscal Year</u>	
	<u>2018</u>	<u>2017</u>
Ethanol	\$ 368,319	\$ 359,239
Dried distillers grains	85,417	63,120
Non-food grade corn oil	20,097	21,195
Modified distillers grains	11,950	8,525
Other	102	74
Total	<u>\$ 485,885</u>	<u>\$ 452,153</u>

Ethanol sales increased from approximately \$359.2 million in the prior year to approximately \$368.3 million in the current year, primarily a result of an increase of 29.8 million gallons (11.6%) sold during fiscal year

2018. The increase in gallons sold is attributable to the capacity expansion projects we have invested in over the last several years. The volume increase was offset by a \$0.11 decline in the price per gallon sold. Dried distillers grains sales increased from approximately \$63.1 million in the prior year to approximately \$85.4 million in the current year, primarily a result of a \$36.31 increase in the price per ton sold. Management believes the price increase is primarily related to stronger export markets in fiscal year 2018 compared to fiscal year 2017. Non-food grade corn oil sales decreased from approximately \$21.2 million in the prior year to approximately \$20.1 million in the current year, primarily a result of a decrease of \$0.04 in the price per pound sold during fiscal year 2018. The price decrease was partially offset by a 10.8% increase in pounds sold during fiscal year 2018. Similar to the ethanol increase, capacity expansion projects undertaken over the last several years are the primary reason for the increase in pounds sold and is consistent with the increased ethanol production. Modified distillers grains sales increased from approximately \$8.5 million in the prior year to approximately \$12.0 million in the current year, primarily a result of an increase of \$13.55 in the price per ton sold during fiscal year 2018. In addition tons of modified distillers grains sold increased 8.2% in fiscal year 2018 compared to fiscal year 2017. We expect that sales of One Earth and NuGen in future periods will be based upon the following:

Product	Annual Sales Quantity
Ethanol	275 million to 300 million gallons
Dried distillers grains	580,000 to 650,000 tons
Non-food grade corn oil	70 million to 100 million pounds
Modified distillers grains	170,000 to 225,000 tons

This expectation assumes that One Earth and NuGen will operate at slightly above historical production levels, based upon recent plant expansion projects, which is dependent upon market conditions, plant profitability and efficient plant operations. We expect production rates at the NuGen ethanol facility to be below historical levels during the first quarter of fiscal year 2019 as weather-related logistical delays have negatively impacted operations. We may vary the amounts of ethanol, dried and modified distillers grains and corn oil produced, and thus, the resulting sales, based upon market conditions. NuGen and One Earth have received the EPA pathway approval and have permits to increase each of their production levels to 150 million gallons annually.

Gross profit was approximately \$43.9 million in fiscal year 2018, or 9.0% of net sales and revenue which was approximately \$7.7 million lower compared to approximately \$51.5 million of gross profit in fiscal year 2017 or 11.4% of net sales and revenue. The crush spread for fiscal year 2018 was approximately \$0.09 per gallon of ethanol sold compared to approximately \$0.23 per gallon of ethanol sold during fiscal year 2017. The increase of approximately \$22.3 million in sales of dried distillers grains compared to the prior year positively affected gross profit. Grain accounted for approximately 77% (\$341.1 million) of our cost of sales during fiscal year 2018 compared to approximately 75% (\$302.1 million) during fiscal year 2017. Natural gas accounted for approximately 6% (\$24.7 million) of our cost of sales during fiscal year 2018 consistent with approximately 6% (\$25.2 million) during fiscal year 2017. The increase of approximately \$3.4 million in sales of modified distillers grains compared to the prior year positively affected gross profit. In addition, corn oil sales negatively impacted gross profit in fiscal year 2018 by approximately \$1.1 million compared to fiscal year 2017. Real estate taxes were approximately \$4.7 million lower in fiscal year 2018 compared to fiscal year 2017 as a result of disputed assessments being settled, and related taxes refunded to the Company. Given the inherent volatility in ethanol, distillers grains, non-food grade corn oil, grain and natural gas prices, we cannot predict the likelihood that the spread between ethanol, distillers grains, non-food grade corn oil and grain prices in future periods will be consistent with prices in historical periods.

We attempt to match quantities of ethanol, distillers grains and non-food grade corn oil sale contracts with an appropriate quantity of grain purchase contracts over a given period of time when we can obtain an adequate margin resulting from the crush spread inherent in the contracts we have executed. However, the market for future ethanol sales contracts generally lags the spot market with respect to ethanol price. Consequently, we

generally execute fixed price contracts for no more than four months into the future at any given time and we may lock in our corn or ethanol price without having a corresponding locked in ethanol or corn price for short durations of time. As a result of the relatively short period of time our fixed price contracts cover, we generally cannot predict the future movements in the crush spread for more than four months. We utilize derivative financial instruments, primarily exchange traded commodity future contracts, in conjunction with certain of our grain procurement activities. None of our forecasted ethanol, approximately 11% of our forecasted distillers grains and approximately 23% of our forecasted non-food grade corn oil production during the next 12 months have been sold under fixed-price contracts. The effect of a 10% adverse change in the price of ethanol, distillers grains and non-food grade corn oil from the current pricing would result in a decrease in annual revenues in fiscal year 2019 of approximately \$45.3 million. Similarly, approximately 2% of our estimated corn usage for the next 12 months was subject to fixed-price contracts. The effect of a 10% adverse change in the price of corn from current pricing would result in an increase in annual cost of goods sold in fiscal year 2019 of approximately \$36.9 million. Approximately 29% of our estimated natural gas usage for the next 12 months was subject to fixed-price contracts. The effect of a 10% adverse change in the price of natural gas from current pricing would result in an increase in annual cost of goods sold in fiscal year 2019 of approximately \$1.7 million.

Selling, general and administrative expenses for fiscal year 2018 were approximately \$16.2 million (3.3% of net sales and revenue) compared to approximately \$17.8 million (3.9% of net sales and revenue) for fiscal year 2017. A majority of the decrease results from lower incentive compensation expense associated with lower profitability levels in fiscal year 2018 compared to fiscal year 2017 as well as our executive compensation program was modified to include a one-time cumulative earnings adjustment for fiscal year 2018. This decrease was partially offset by increases in ethanol freight expense and professional fees in fiscal year 2018 compared to fiscal year 2017.

During fiscal years 2018 and 2017, we recognized income of approximately \$1.5 million and \$3.2 million, respectively, from our equity investment in Big River. Our investment in Big River, which has interests in four ethanol production plants, has an effective ownership of ethanol gallons shipped in the trailing twelve months ended January 31, 2019 of approximately 370 million gallons.

Interest and other income was approximately \$2.5 million for fiscal year 2018 compared to approximately \$1.6 million for fiscal year 2017. The income has increased as yields on our excess cash have improved compared to fiscal year 2017. Fiscal year 2017 income includes federal grants of approximately \$0.7 million.

Income related to noncontrolling interests was approximately \$5.9 million and approximately \$5.7 million during fiscal years 2018 and 2017, respectively. These amounts represent the other owners' share of the income of NuGen and One Earth.

The provision for income taxes was approximately \$2.3 million in fiscal year 2018 compared to a benefit for income taxes of approximately \$3.2 million in fiscal year 2017. During fiscal year 2018, we recognized the tax benefits of research and experimentation credits earned by our ethanol plants. These credits significantly reduced the tax provision during fiscal year 2018. The Tax Act was enacted on December 22, 2017 and became effective January 1, 2018, making significant changes to the Internal Revenue Code. Among other provisions, the Tax Act reduces the federal statutory corporate income tax rate from 35% to 21%. Accordingly, the carrying value of our deferred tax liabilities was materially decreased, resulting in an income tax benefit for fiscal year 2017.

Segment profit for fiscal year 2018 was approximately \$23.3 million, a decrease of approximately \$12.6 million from approximately \$35.9 million for fiscal year 2017. The decrease from fiscal year 2017 results is primarily related to lower gross profit levels in fiscal year 2018 compared to fiscal year 2017 and a tax benefit

recognized in fiscal year 2017 related to remeasuring deferred tax liabilities as the TaxAct lowered the statutory federal income tax rate on corporations from 35% to 21%.

Refined Coal Segment

The refined coal segment includes the consolidated financial results of our refined coal entity and certain administrative expenses. We acquired the refined coal entity during the third quarter of fiscal year 2017.

The refined coal entity sells one product, refined coal. We record sales in the refined coal segment net of the cost of coal as we purchase the coal feedstock from the customer to which refined coal is sold. Sales increased from approximately \$433,000 in the prior year to approximately \$786,000 in the current year. The increase results primarily from the entity operating the entire year of fiscal year 2018 compared to approximately half a year in fiscal year 2017. We expect future period sales to vary depending on fluctuations in demand from the site host utility, which generally change based upon weather conditions in the geographic markets the utility serves and competing fuel prices and supplies.

Gross loss was approximately \$13.6 million in fiscal year 2018, which was approximately \$6.3 million greater compared to approximately \$7.3 million of gross loss in fiscal year 2017. The increase in gross loss results primarily from the entity operating the entire year of fiscal year 2018 compared to approximately half a year in fiscal year 2017. We expect future period gross loss to vary in generally the same manner as the sales fluctuations described above. Based on the agreements in place that govern the operations, sales and purchasing activities of the refined coal plant, we expect that the refined coal operation will continue operating at a gross loss and that the ongoing losses will be subsidized by federal production income tax credits.

Selling, general and administrative expenses were approximately \$1.6 million and approximately \$2.7 million in fiscal years 2018 and 2017, respectively. The decrease in expense is primarily related to lower commission expense, payable to the minority investor in the refined coal entity. The commission expense is associated with the refined coal acquisition.

Income related to noncontrolling interests was approximately \$0.7 million and approximately \$0.5 million during fiscal years 2018 and 2017, respectively. This amount represents the other owner's share of the pre-tax loss of refined coal operations.

The benefit for income taxes was approximately \$24.7 million and approximately \$15.2 million during fiscal years 2018 and 2017, respectively. These amounts include the benefit of Section 45 production tax credits and a benefit related to segment loss before income taxes. The refined coal facility is eligible to earn tax credits through November, 2021. However, the amount of credits earned will vary with annual production levels.

As a result of the foregoing, including the benefit of federal tax credits associated with refined coal production and sales, segment profit was approximately \$10.1 million and approximately \$5.6 million for fiscal years 2018 and 2017, respectively.

Corporate and Other

Selling, general and administrative expenses for fiscal year 2018 were approximately \$2.8 million compared with \$3.6 million for fiscal year 2017. The decrease was primarily related to higher professional expenses incurred in fiscal year 2017 that were associated with due diligence and other efforts related to researching the refined coal operations prior to our refined coal acquisition.

Interest and other income was approximately \$1.0 million for fiscal year 2018 versus approximately \$0.7 million for fiscal year 2017. The income has increased as yields on our excess cash have improved compared to fiscal year 2017.

We do not expect to recover any of the portion of the noncontrolling interests holder's share of prior Future Energy losses, thus, we recognized approximately \$0.7 million of expense in fiscal year 2018.

Corporate and other expenses exceeded interest and other income, for fiscal year 2018 by approximately \$1.8 million, consistent with fiscal year 2017.

Comparison of Fiscal Years 2017 and 2016 (Consolidated Results)

Net Sales and Revenue – Net sales and revenue in fiscal year 2017 were approximately \$452.6 million, consistent with fiscal year 2016 sales.

Gross Profit – Gross profit was approximately \$44.2 million in fiscal year 2017, or 9.8% of net sales and revenue, compared to approximately \$71.0 million in fiscal year 2016, or 15.7% of net sales and revenue. Gross profit for fiscal year 2017 decreased by approximately \$19.5 million compared to fiscal year 2016 as a result of operations in the ethanol and by-products segment and by approximately \$7.3 million as a result of operations in the refined coal segment.

Selling, General and Administrative Expenses – Selling, general and administrative expenses for fiscal year 2017 were approximately \$24.1 million (5.3% of net sales and revenue), an increase of approximately \$2.7 million or 12.5% from approximately \$21.4 million (4.7% of net sales and revenue) for fiscal year 2016. The increase was primarily related to professional fees and commission expense associated with the refined coal acquisition.

Equity in Income of Unconsolidated Ethanol Affiliates – During fiscal years 2017 and 2016, we recognized income of approximately \$3.2 million and \$6.1 million, respectively, from our equity investment in Big River, which is included in our ethanol and by-products segment results. Income recognized in fiscal year 2017 was reduced by approximately \$0.8 million as a result of an asset impairment charge Big River incurred which was related to an abandoned protein production project.

Interest and Other Income – Interest and other income for fiscal year 2017 was approximately \$2.3 million compared to approximately \$0.6 million for fiscal year 2016. Interest income has increased as yields on our excess cash have improved compared to fiscal year 2016. Income in fiscal year 2017 includes federal grants of approximately \$0.7 million.

(Loss) Gain on Disposal of Real Estate and Property and Equipment, net – We recognized losses of approximately \$0.2 million in fiscal year 2017 compared to gains of approximately \$0.3 million in fiscal year 2016. We sold three real estate properties in fiscal years 2016, which completed the sales of our former retail properties. The losses in fiscal year 2017 result from disposals of ethanol plant equipment.

Income Before Income Taxes – As a result of the foregoing, income before income taxes was approximately \$25.4 million for fiscal year 2017 versus approximately \$56.9 million for fiscal year 2016.

Provision for Income Taxes – Our effective tax rate was a benefit of 76.9% and a provision of 30.6% for fiscal years 2017 and 2016, respectively. Our effective rate is impacted by the noncontrolling interests of the companies we consolidate, as we recognize 100% of their income or loss in income before income taxes and noncontrolling interests. However, we only provide an income tax provision or benefit for our portion of the subsidiaries' income or loss with a noncontrolling interest. During fiscal year 2017, our effective rate decreased

by 45.4% (approximately \$11.5 million) as a result of Section 45 production tax credits earned by our refined coal facility. The Tax Act reduced the federal income tax rate on corporations from 35% to 21%, which resulted in a benefit of 56.6% (approximately \$14.4 million) to our effective tax rate as our deferred tax liabilities were remeasured at the lower federal income tax rate. Our domestic production activities deduction increased from 2.9% in fiscal year 2016 to 5.9% (total benefit of approximately \$1.5 million) in fiscal year 2017, primarily as a result of agricultural cooperative patronage.

Net Income – As a result of the foregoing, net income was approximately \$44.9 million for fiscal year 2017 compared to approximately \$39.5 million for fiscal year 2016.

Noncontrolling Interests– Income attributable to noncontrolling interests was approximately \$5.2 million and \$7.2 million during fiscal years 2017 and 2016, respectively, and represents the other owners' share of the income or loss of NuGen, One Earth, the refined coal entity and Future Energy. Income attributable to noncontrolling interests of One Earth and NuGen were approximately \$5.6 million and approximately \$0.1 million, respectively, during fiscal year 2017 and were approximately \$7.1 million and approximately \$0.2, respectively, during fiscal year 2016. The loss attributable to noncontrolling interest of the refined coal entity was approximately \$0.5 million during fiscal year 2017.

Net Income Attributable to REX Common Shareholders – As a result of the foregoing, net income attributable to REX common shareholders was approximately \$39.7 million for fiscal year 2017 compared to approximately \$32.3 million for fiscal year 2016.

Business Segment Results

We have two reportable segments, i) ethanol and by-products and ii) refined coal. In fiscal year 2017, we began reporting the results of our refined coal operation as a new segment as a result of the August 10, 2017 acquisition of an entity that operates a refined coal facility. Prior to the acquisition, we had one reportable segment, ethanol.

The following sections discuss the results of operations of our ethanol and by-products segment and corporate and other. As discussed in Note 16, our chief operating decision maker (as defined by ASC 280) evaluates the operating performance of our business segments using net income attributable to REX common shareholders. The following tables summarize segment and other results and assets (amounts in thousands):

Net sales and revenue:	Fiscal Year	
	2017	2016
Ethanol and by-products	\$ 452,153	\$ 453,799
Refined coal ¹	433	—
Total net sales and revenue	<u>\$ 452,586</u>	<u>\$ 453,799</u>

Segment gross profit (loss):

Ethanol and by-products	\$ 51,509	\$ 71,039
Refined coal	(7,348)	—
Total gross profit	<u>\$ 44,161</u>	<u>\$ 71,039</u>

Income (loss) before income taxes:

Ethanol and by-products	\$ 38,352	\$ 59,447
Refined coal	(10,021)	—
Corporate and other	(2,938)	(2,536)
Total income before income taxes	<u>\$ 25,393</u>	<u>\$ 56,911</u>

Benefit (provision) for income taxes:

Ethanol and by-products	\$ 3,245	\$ (18,259)
Refined coal	15,168	—
Corporate and other	1,106	866
Total benefit (provision) for income taxes	<u>\$ 19,519</u>	<u>\$ (17,393)</u>

Segment profit (loss):

Ethanol and by-products	\$ 35,880	\$ 33,950
Refined coal	5,628	—
Corporate and other	(1,802)	(1,617)
Net income attributable to REX common shareholders	<u>\$ 39,706</u>	<u>\$ 32,333</u>

¹ We record sales in the refined coal segment net of the cost of coal as we purchase the coal feedstock from the customer to which refined coal is sold.

Ethanol and by-products Segment

The ethanol and by-products segment includes the consolidated financial results of One Earth and NuGen, our equity investment in Big River and certain administrative expenses. The following table summarizes selected data from One Earth and NuGen:

	Fiscal Year	
	2017	2016
Average selling price per gallon of ethanol	\$ 1.40	\$ 1.45
Gallons of ethanol sold (in millions)	256.0	246.9
Average selling price per ton of dried distillers grains	\$ 105.89	\$ 123.97
Tons of dried distillers grains sold	596,099	574,390
Average selling price per pound of non-food grade corn oil	\$ 0.29	\$ 0.28
Pounds of non-food grade corn oil sold (in millions)	73,817	67,178
Average selling price per ton of modified distillers grains	\$ 45.87	\$ 50.10
Tons of modified distillers grains sold	185,848	106,313
Average cost per bushel of grain	\$ 3.35	\$ 3.45
Average cost of natural gas (per mmbtu)	\$ 3.75	\$ 3.24

The following table summarizes sales from One Earth and NuGen, by product group (amounts in thousands):

Product or Service Category	Fiscal Year	
	2017	2016
Ethanol	\$ 359,239	\$ 358,349
Dried distillers grains	63,120	71,204
Non-food grade corn oil	21,195	18,518
Modified distillers grains	8,525	5,326
Other	74	402
Total	\$ 452,153	\$ 453,799

Ethanol sales increased from approximately \$358.3 million in the prior year to approximately \$359.2 million in the current year, primarily a result of an increase of 9.1 million gallons (3.7%) sold during fiscal year 2017. The increase in gallons sold is attributable to the capacity expansion projects we have invested in over the last several years. The volume increase was offset by a \$0.05 decline in the price per gallon sold. Dried distillers grains sales decreased from approximately \$71.2 million in the prior year to approximately \$63.1 million in the current year, primarily a result of a \$18.08 decline in the price per ton sold. The selling price decrease was partially offset by an increase of 21,709 tons (3.8%) sold during fiscal year 2017, a result of the same factors discussed above regarding ethanol volume increases. Management believes the decline in the selling price results primarily from the uncertainty regarding Chinese imports of domestic dried distillers grains as the China Ministry of Commerce had announced an anti-dumping and countervailing duty investigation in January 2016 and, in September 2016, imposed an anti-dumping tariff and a countervailing duty on U.S. dried distillers grains exports to China. In a final ruling in January 2017, China increased the dried distillers grains anti-dumping duty to a range of 42.2% up to 53.7% and the dried distillers grains countervailing duty to a range of 11.2% up to 12.0%. In November 2017, the China Ministry of Commerce announced that the countervailing duty would be repealed. In addition, Vietnam suspended imports of U.S. dried distillers grains for a majority of fiscal year 2017 and this also contributed to the decline in dried distillers grains prices. In September 2017,

Vietnam lifted its ban on imports of U.S. dried distillers grains. Our non-food grade corn oil sales increased from approximately \$18.5 million in the prior year to approximately \$21.2 million in the current year, primarily a result of an increase of 6.6 million pounds (9.9%) sold during the current year. Similar to the ethanol and dried distillers grains increases, the capacity expansion projects we have completed are the primary reason for the increase in pounds sold and are consistent with the increased ethanol production. Modified distillers grains sales increased from approximately \$5.3 million in the prior year to approximately \$8.5 million in the current year, primarily a result of a 74.8% increase in tons sold which was partially offset by a decline of \$4.23 in the price per ton sold.

Gross profit was approximately \$51.5 million in fiscal year 2017, or 11.4% of net sales and revenue which was approximately \$19.5 million lower compared to approximately \$71.0 million of gross profit in fiscal year 2016 or 15.7% of net sales and revenue. The crush spread for fiscal year 2017 was approximately \$0.23 per gallon of ethanol sold compared to approximately \$0.25 per gallon of ethanol sold during fiscal year 2016. The decline of approximately \$8.1 million in sales of dried distillers grains compared to fiscal year 2016 negatively affected gross profit. Grain accounted for approximately 75% (\$302.1 million) of our cost of sales during fiscal year 2017 compared to approximately 77% (\$293.8 million) during fiscal year 2016. Natural gas accounted for approximately 6% (\$25.2 million) of our cost of sales during fiscal year 2017 compared to approximately 5% (\$20.6 million) during fiscal year 2016. The volume of ethanol sold during fiscal year 2017 compared to fiscal year 2016 positively impacted gross profit by approximately \$2.1 million. In addition, corn oil sale positively impacted gross profit in fiscal year 2017 by approximately \$2.7 million compared to fiscal year 2016. Plant related repairs and maintenance expense was approximately \$1.7 million higher in fiscal year 2017 compared to fiscal year 2016.

Selling, general and administrative expenses for fiscal year 2017 were approximately \$17.8 million (3.9% of net sales and revenue), consistent with fiscal year 2016 levels.

During fiscal years 2017 and 2016, we recognized income of approximately \$3.2 million and \$6.1 million, respectively, from our equity investment in Big River. Our investment in Big River, which has interests in four ethanol production plants, had an effective ownership of ethanol gallons shipped in the trailing twelve months January 31, 2018 of approximately 363 million gallons.

Interest and other income was approximately \$1.6 million for fiscal year 2017 compared to approximately \$0.2 million for fiscal year 2016. The income had increased as yields on our excess cash had improved compared to fiscal year 2016. Fiscal year 2017 income included federal grants of approximately \$0.7 million.

Income related to noncontrolling interests was approximately \$5.7 million and approximately \$7.2 million during fiscal years 2017 and 2016, respectively. These amounts represent the other owners' share of the income of NuGen and One Earth.

The benefit for income taxes was approximately \$3.2 million in fiscal year 2017 compared to a provision (expense) of \$18.3 million in fiscal year 2016. The Tax Act was enacted on December 22, 2017 and became effective January 1, 2018, making significant changes to the Internal Revenue Code. Among other provisions, the Tax Act reduces the federal statutory corporate income tax rate from 35% to 21%. Accordingly, the carrying value of our deferred tax liabilities was materially decreased, resulting in an income tax benefit for fiscal year 2017.

Segment profit for fiscal year 2017 was approximately \$35.9 million, an increase of approximately \$1.9 million from approximately \$34.0 million for fiscal year 2016. The increase from fiscal year 2016 results was primarily related to a tax benefit recognized in fiscal year 2017 related to remeasuring deferred tax liabilities as the Tax Act lowered the statutory federal income tax rate on corporations from 35% to 21%. This tax benefit more than offset lower gross profit levels in fiscal year 2017 compared to fiscal year 2016.

Refined Coal Segment

The refined coal segment includes the consolidated financial results of our refined coal entity and certain administrative expenses. We acquired the refined coal entity during the third quarter of fiscal year 2017. The refined coal entity sells one product, refined coal. Sales were approximately \$433,000 in fiscal year 2017, the initial period for which we reported the results of refined coal operations. We record sales in the refined coal segment net of the cost of coal as we purchase the coal feedstock from the customer to which refined coal is sold.

Gross loss was approximately \$7.3 million in fiscal year 2017. We expect future period gross loss to vary in generally the same manner as the sales fluctuations described above.

Selling, general and administrative expenses were approximately \$2.7 million in fiscal year 2017. These expenses included approximately \$1.8 million of commission expense, payable to the minority investor in the refined coal entity. The commission expense was associated with the refined coal acquisition.

Income related to noncontrolling interests was approximately \$0.5 million during fiscal year 2017. This amount represented the other owner's share of the pre-tax loss of refined coal operations.

The benefit for income taxes was approximately \$15.2 million during fiscal year 2017 and included the benefit of Section 45 production tax credits and a benefit related to segment loss before income taxes.

As a result of the foregoing, including the benefit of federal tax credits associated with refined coal production and sales, segment profit for fiscal year 2017 was approximately \$5.6 million.

Corporate and Other

Selling, general and administrative expenses for fiscal year 2017 were approximately \$3.6 million compared with approximately \$3.2 million for fiscal year 2016. The increase is primarily related to higher professional expenses associated with due diligence and other efforts related to researching the refined coal operations prior to our refined coal acquisition.

Interest and other income was approximately \$0.7 million for fiscal year 2017 compared to approximately \$0.4 million for fiscal year 2016. The income has increased as yields on our excess cash have improved compared to fiscal year 2016.

Loss related to noncontrolling interests was insignificant during fiscal years 2017 and 2016. This amount represents the other owner's share of the loss of Future Energy.

Corporate and other expenses exceeded interest and other income and gain on disposal of property and equipment, for fiscal year 2017 by approximately \$1.8 million, consistent with the \$1.6 million loss for fiscal year 2016. The increase from fiscal year 2016 results is primarily related to increased professional expenses, not allocated to the ethanol and by-products or refined coal segments described above.

Liquidity and Capital Resources

Our primary sources of cash have been income from operations. Our primary uses of cash have been capital expenditures at our ethanol plants, the acquisition of the refined coal entity, stock repurchases and contributions to fund refined coal operating losses.

Outlook – Our cash balance of approximately \$188.5 million at January 31, 2019 includes approximately \$148.7 million held by One Earth and NuGen. We expect that One Earth and NuGen will use a majority of their cash for working capital needs, capital expenditures, general corporate purposes and dividend payments. We expect our equity method investee to limit the payment of dividends based upon working capital needs.

We are investigating various uses of our excess cash. We have a stock buyback program, and given our authorization level we could repurchase a total of 349,861 shares at January 31, 2019. We typically repurchase our common stock when our stock price is trading at prices we deem to be a discount to the underlying value of our net assets. We plan to seek and evaluate other various investment opportunities including energy related, agricultural or other ventures we believe fit our investment criteria.

We expect capital expenditures to be in the range of approximately \$4 million to \$6 million in fiscal year 2019 for various projects at our consolidated ethanol plants. However, actual capital expenditures could vary from this range for unexpected expenditures as our plants continue to age. We expect to fund these capital expenditures with available cash at our ethanol plant subsidiaries.

Operating Activities – Net cash provided by operating activities was approximately \$47.9 million for fiscal year 2018 compared to approximately \$41.0 million in fiscal year 2017. During fiscal year 2018, operating cash flow was provided by net income of approximately \$37.5 million and adjustments of approximately \$(0.4) million, which consist of depreciation, stock based compensation expense, interest income from investments, income from equity method investments, loss on disposal of real estate and property and equipment and the deferred income tax provision. Big River paid dividends to REX of approximately \$4.0 million during fiscal year 2018. Accounts receivable decreased approximately \$1.5 million, primarily a result of the timing of products shipped and the receipt of customer payments at One Earth and NuGen. Inventory decreased approximately \$2.3 million, primarily a result of the timing of finished goods shipments to customers. Prepaid expenses and other assets decreased approximately \$5.2 million, primarily a result of refunds paid to us for refundable real estate taxes. Income taxes refundable increased approximately \$1.1 million, primarily as a result of carrying back general business credits to prior years and claiming refunds of income taxes. Accrued expenses and other liabilities decreased approximately \$1.5 million, primarily a result of lower bonus accruals for fiscal year 2018.

Net cash provided by operating activities was approximately \$41.0 million for fiscal year 2017. During fiscal year 2017, operating cash flow was provided by net income of approximately \$44.9 million and adjustments of approximately \$1.5 million, which consist of depreciation, stock based compensation expense, income from equity method investments, loss on sale of investment and disposal of real estate and property and equipment and the deferred income tax provision. Big River paid dividends to REX of approximately \$6.5 million during fiscal year 2017. Accounts receivable increased approximately \$1.1 million, primarily a result of the timing of products shipped and the receipt of customer payments at One Earth and NuGen. Inventory increased approximately \$3.6 million, primarily a result of the timing of finished goods shipments to customers. Prepaid expenses and other assets increased approximately \$1.2 million, primarily a result of increased payment for refundable real estate taxes. Income taxes refundable increased approximately \$5.5 million, primarily as a result of carrying back Section 45 credits to the prior year and claiming a refund of income taxes. Accounts payable decreased approximately \$1.7 million, primarily a result of the timing of vendor payments and inventory receipts. Accrued expenses and other liabilities increased approximately \$1.2 million, primarily a result of increases in accrued commission payable related to the refined coal acquisition.

Investing Activities – Net cash used in investing activities was approximately \$24.6 million during fiscal year 2018 compared to approximately \$35.7 million during fiscal year 2017. Capital expenditures in fiscal year 2018 totaled approximately \$10.8 million, the majority of which was plant expansion capacity projects at One Earth’s and NuGen’s ethanol plants. During fiscal year 2018, we used cash of approximately \$126.0 million for purchases of short-term investments and received cash of approximately \$112.1 million related to maturities of these investments as one of these investments remained outstanding at January 31, 2019. We began investing in highly liquid short-term investments during fiscal year 2018 in order to increase earnings on excess cash.

Net cash used in investing activities was approximately \$35.7 million during fiscal year 2017. Capital expenditures in fiscal year 2017 totaled approximately \$24.0 million, the majority of which was plant expansion capacity projects at One Earth’s and NuGen’s ethanol plants. During fiscal year 2017, we used cash of approximately \$12.0 million for the refined coal acquisition.

Financing Activities – Net cash used in financing activities was approximately \$25.8 million during fiscal year 2018 compared to approximately \$2.6 million for fiscal year 2017. During fiscal year 2018, we used cash of approximately \$4.5 million to purchase shares from and pay dividends to noncontrolling members. During fiscal year 2018, we received approximately \$0.5 million in capital contributions from the minority investor in the refined coal entity. We expect to continue to receive these capital contributions in the future as we expect the minority investor to continue funding its proportionate share of refined coal operating losses. During fiscal year 2018, we purchased approximately 305,000 shares of our common stock for approximately \$21.9 million in open market transactions.

Net cash used in financing activities was approximately \$2.6 million during fiscal year 2017. During fiscal year 2017, we used cash of approximately \$3.5 million to purchase shares from and pay dividends to noncontrolling members of One Earth and NuGen. During fiscal year 2017, we received approximately \$0.9 million in capital contributions from the minority investor in the refined coal entity.

Based on our forecasts, which are primarily based on estimates of plant production, prices of ethanol, corn, distillers grains, non-food grade corn oil and natural gas as well as other assumptions, management believes that cash flow from operating activities together with working capital will be sufficient to meet One Earth’s and NuGen’s respective liquidity needs. However, if a material adverse change in the financial position of One Earth or NuGen should occur, or if actual sales or expenses are substantially different than what has been forecasted, One Earth’s and NuGen’s liquidity, and ability to fund future operating and capital requirements could be negatively impacted.

We expect to fund future operating losses at our refined coal facility with cash at the parent company level.

Approximately 4.9% of our net assets are restricted pursuant to the terms of various loan agreements of our equity method investment as of January 31, 2019. None of our consolidated subsidiaries or the parent company has restricted net assets at January 31, 2019.

Off Balance Sheet Arrangements

None.

Tabular Disclosure of Contractual Obligations

In the ordinary course of business, we enter into agreements under which we are legally obligated to make future cash payments. These agreements include obligations related to purchasing inventory and leasing rail cars. The following table summarizes by category expected future cash outflows associated with contractual obligations in effect, at January 31, 2019 (amounts in thousands):

<u>Contractual Obligations</u>	<u>Payment due by period</u>				
	<u>Total</u>	<u>Less than 1 Year</u>	<u>1-3 Years</u>	<u>3-5 Years</u>	<u>More than 5 Years</u>
Other (a)	\$ 40,598	\$ 18,906	\$ 10,980	\$ 5,952	\$ 4,760

(a) Amounts primarily represent payments due for rail car leases, a natural gas pipeline, grain and other contracts at One Earth and NuGen. We are not able to determine the likely settlement period for uncertain tax positions, accordingly, approximately \$9.2 million of uncertain tax positions and related interest and penalties have been excluded from the table above. We are not able to determine the likely settlement for forward basis corn purchase contracts which do not contain a determinable fixed price; accordingly, payments for such contracts have been excluded from the table above.

Seasonality and Quarterly Fluctuations

Our business is directly affected by the supply and demand for ethanol. The demand for ethanol typically increases during the spring and summer months from vacation travel and during holiday travel.

Impact of Inflation

The impact of inflation has not been material to our results of operations for the past three fiscal years.

Critical Accounting Policies

We believe the application of the following accounting policies, which are important to our financial position and results of operations, require significant assumptions, judgments and estimates on the part of management. We base our assumptions, judgments, and estimates on historical experience, current trends and other factors that management believes to be relevant at the time our consolidated financial statements are prepared. On a regular basis, management reviews the accounting policies, assumptions, estimates and judgments to ensure that our financial statements are presented in accordance with generally accepted accounting principles (GAAP). However, because future events and their effects cannot be determined with certainty, actual results could differ from our assumptions and estimates, and such differences could be material. Further, if different assumptions, judgments and estimates had been used, the results could have been different and such differences could be material. For a summary of all of our accounting policies, including the accounting policies discussed below, see Note 1 to the Consolidated Financial Statements. Management believes that the following accounting policies are the most critical to aid in fully understanding and evaluating our reported financial results, and they require management's most difficult, subjective or complex judgments, resulting from the need to make estimates about the effect of matters that are inherently uncertain.

Revenue Recognition – For ethanol and by-products segment sales, we recognize sales of ethanol, distillers grains and non-food grade corn oil when obligations under the terms of the respective contracts with customers are satisfied; this occurs with the transfer of control of products, generally upon shipment from the ethanol plant or upon loading of the rail car used to transport the products. For refined coal segment sales, we recognize sales of refined coal when obligations under the term of the contract with its customer are satisfied; this occurs when control of the product transfers to the customer, generally upon the refined coal leaving the plant. Refined coal sales are recorded net of the cost of coal as we purchase the coal feedstock from our customer to which we sell refined coal.

Financial Instruments – Certain of the forward grain purchase and ethanol, distillers grains and non-food grade corn oil sales contracts are accounted for under the “normal purchases and normal sales” scope exemption of ASC 815, “*Derivatives and Hedging*” (“ASC 815”) because these arrangements are for purchases of grain that will be delivered in quantities expected to be used by us and sales of ethanol, distillers grains and non-food grade corn oil that will be produced in quantities expected to be sold by us over a reasonable period of time in the normal course of business. During fiscal years 2018, 2017 and 2016, there were no material settlements of forward contracts that were recorded at fair value.

We use derivative financial instruments (exchange-traded futures contracts) to manage a portion of the risk associated with changes in commodity prices, primarily related to corn. We monitor and manage this exposure as part of our overall risk management policy. As such, we seek to reduce the potentially adverse effects that the volatility of these markets may have on our operating results. We may take hedging positions in these commodities as one way to mitigate risk. While we attempt to link our hedging activities to purchase and sales activities, there are situations in which these hedging activities can themselves result in losses. We do not hold or issue derivative financial instruments for trading or speculative purposes. The changes in fair value of these derivative financial instruments are recognized in current period earnings as we do not use hedge accounting.

Income Taxes – Income taxes are recorded based on the current year amounts payable or refundable, as well as the consequences of events that give rise to deferred tax assets and liabilities based on differences in how those events are treated for tax purposes, net of valuation allowances. We base our estimate of deferred tax assets and liabilities on current tax laws and rates and other expectations about future outcomes. Changes in existing regulatory tax laws and rates and future business results may affect the amount of deferred tax liabilities or the valuation of deferred tax assets over time. We have established valuation allowances for certain state net operating loss carryforwards. We determined that it is more likely than not that we will be able to generate sufficient taxable income in future years to allow for the full utilization of the other deferred tax assets other than those reserved. In determining the need for a valuation allowance, we have projected that our ethanol plants will generate future taxable income. We are projecting that the future operations of One Earth, NuGen and Big River will be profitable. As we earn federal income tax credits (pursuant to Internal Revenue Code Section 45) based on the amount of refined coal produced and sold, variations in refined coal production and related sales will result in changes in our future effective income tax rate.

New Accounting Pronouncements

For information related to recent accounting pronouncements, see Note 1 of the Notes to the Consolidated Financial Statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to the impact of market fluctuations associated with commodity prices as discussed below.

Commodity Price Risk

We manage a portion of our risk with respect to the volatility of commodity prices inherent in the ethanol industry by using forward purchase and sale contracts. At January 31, 2019, One Earth and NuGen combined have purchase commitments for approximately 13.0 million bushels of corn, the principal raw material for their ethanol plants. One Earth and NuGen expect to take delivery of a majority of the corn by June 2019. One Earth and NuGen have combined sales commitments for approximately 32.3 million gallons of ethanol, 88,000 tons of distillers grains and 18.2 million pounds of non-food grade corn oil. One Earth and NuGen expect to deliver a majority of the ethanol, distillers grains and non-food grade corn oil through March 2019. Our exposure to market risk, which includes the impact of our risk management activities, is based on the estimated effect on pre-tax income starting on January 31, 2019, are as follows (amounts in thousands):

<u>Commodity</u>	<u>Estimated Total Volume Requirements for the Next 12 Months</u>	<u>Unit of Measure</u>	<u>Decrease in Pre-tax Income From a 10% Adverse Change in Price</u>
Ethanol	298,000	Gallons	\$ 35,395
Corn	106,429	Bushels	\$ 36,950
Distillers Grains	790	Tons	\$ 8,407
Non-food grade Corn Oil	78,000	Pounds	\$ 1,508
Natural Gas	7,430	MMBTU	\$ 1,699

Item 8. Financial Statements and Supplementary Data

REX AMERICAN RESOURCES CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(Amounts in Thousands)

	January 31,	
	2019	2018
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 188,531	\$ 190,988
Restricted cash	281	354
Short-term investments	14,975	—
Accounts receivable	11,378	12,913
Inventory	18,477	20,755
Refundable income taxes	7,695	6,612
Prepaid expenses and other	9,284	7,412
Total current assets	<u>250,621</u>	<u>239,034</u>
Property and equipment - net	182,521	197,827
Other assets	6,176	7,454
Equity method investments	32,075	34,549
TOTAL ASSETS	<u>\$ 471,393</u>	<u>\$ 478,864</u>
LIABILITIES AND EQUITY		
CURRENT LIABILITIES:		
Accounts payable – trade	\$ 7,463	\$ 8,149
Accrued expenses and other current liabilities	9,546	13,716
Total current liabilities	<u>17,009</u>	<u>21,865</u>
LONG TERM LIABILITIES:		
Deferred taxes	4,185	21,706
Other long term liabilities	4,928	3,367
Total long term liabilities	<u>9,113</u>	<u>25,073</u>
COMMITMENTS AND CONTINGENCIES (Note 13)		
EQUITY:		
REX shareholders' equity:		
Common stock, 45,000 shares authorized, 29,853 shares issued at par	299	299
Paid in capital	148,273	146,923
Retained earnings	579,558	547,913
Treasury stock, 23,580 and 23,287 shares, respectively	(335,193)	(313,643)
Total REX shareholders' equity	<u>392,937</u>	<u>381,492</u>
Noncontrolling interests	52,334	50,434
Total equity	<u>445,271</u>	<u>431,926</u>
TOTAL LIABILITIES AND EQUITY	<u>\$ 471,393</u>	<u>\$ 478,864</u>

See notes to consolidated financial statements.

REX AMERICAN RESOURCES CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(Amounts in Thousands, Except Per Share Amounts)

	Years Ended January 31,		
	2019	2018	2017
Net sales and revenue	\$ 486,671	\$ 452,586	\$ 453,799
Cost of sales	456,456	408,425	382,760
Gross profit	30,215	44,161	71,039
Selling, general and administrative expenses	(20,551)	(24,060)	(21,388)
Equity in income of unconsolidated affiliates	1,536	3,232	6,144
Interest and other income, (net)	3,388	2,060	1,116
Income before income taxes	14,588	25,393	56,911
Benefit (provision) for income taxes	22,922	19,519	(17,393)
Net income	37,510	44,912	39,518
Net income attributable to noncontrolling interests	(5,865)	(5,206)	(7,185)
Net income attributable to REX common shareholders	<u>\$ 31,645</u>	<u>\$ 39,706</u>	<u>\$ 32,333</u>
Weighted average shares outstanding – basic and diluted	6,440	6,596	6,587
Basic and diluted net income per share attributable to REX common shareholders	<u>\$ 4.91</u>	<u>\$ 6.02</u>	<u>\$ 4.91</u>

See notes to consolidated financial statements.

REX AMERICAN RESOURCES CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE YEARS ENDED JANUARY 31, 2019, 2018 AND 2017
(Amounts in Thousands)

	REX Shareholders							
	Common Shares Issued		Treasury		Paid-in Capital	Retained Earnings	Noncontrolling Interest	Total Equity
	Shares	Amount	Shares	Amount				
Balance at January 31, 2016	29,853	\$ 299	23,204	\$ (309,754)	\$ 144,844	\$ 475,874	\$ 44,496	\$ 355,759
Net income						32,333	7,185	39,518
Treasury stock acquired			88	(4,353)				(4,353)
Noncontrolling interests distribution and other							(3,842)	(3,842)
Issuance of equity awards, stock based compensation expense and related tax effects	—	—	—	269	923	—	—	1,192
Balance at January 31, 2017	29,853	299	23,292	(313,838)	145,767	508,207	47,839	388,274
Net income						39,706	5,206	44,912
Capital contributions							918	918
Noncontrolling interests distribution and other							(3,529)	(3,529)
Issuance of equity awards, stock based compensation expense and related tax effects	—	—	(5)	195	1,156	—	—	1,351
Balance at January 31, 2018	29,853	299	23,287	(313,643)	146,923	547,913	50,434	431,926
Net income						31,645	5,865	37,510
Capital contributions							524	524
Treasury stock acquired			305	(21,855)				(21,855)
Noncontrolling interests distribution and other							(4,489)	(4,489)
Issuance of equity awards and stock based compensation expense	—	—	(12)	305	1,350	—	—	1,655
Balance at January 31, 2019	<u>29,853</u>	<u>\$ 299</u>	<u>23,580</u>	<u>\$ (335,193)</u>	<u>\$ 148,273</u>	<u>\$ 579,558</u>	<u>\$ 52,334</u>	<u>\$ 445,271</u>

See notes to consolidated financial statements.

REX AMERICAN RESOURCES CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in Thousands)

	Years Ended January 31,		
	2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income	\$ 37,510	\$ 44,912	\$ 39,518
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	24,828	21,462	19,519
Stock based compensation expense	669	1,641	1,314
Income from equity method investments	(1,536)	(3,232)	(6,144)
Dividends received from equity method investments	4,010	6,516	7,018
Interest income from investments	(1,077)	—	—
Loss (gain) on sale of investment	—	13	(192)
Loss (gain) on disposal of real estate and property and equipment	104	192	(328)
Deferred income tax	(23,364)	(18,605)	3,043
Changes in assets and liabilities:			
Accounts receivable	1,535	(1,089)	(2,535)
Inventory	2,278	(3,649)	121
Prepaid expenses and other assets	5,217	(1,170)	(1,357)
Income taxes refundable	(1,083)	(5,542)	4,184
Accounts payable-trade	339	(1,705)	36
Accrued expenses and other liabilities	(1,499)	1,225	4,912
Net cash provided by operating activities	<u>47,931</u>	<u>40,969</u>	<u>69,109</u>
CASH FLOWS FROM INVESTING ACTIVITIES:			
Capital expenditures	(10,775)	(24,017)	(14,208)
Purchase of short-term investment	(125,989)	—	—
Sale of short-term investments	112,091	—	—
Acquisition of business, net of cash acquired	—	(12,049)	—
Proceeds from sale of investment	—	64	4,492
Proceeds from sale of real estate and property and equipment	—	104	1,511
Repayment of note receivable	27	26	24
Restricted investments and deposits	5	150	510
Net cash used in investing activities	<u>(24,641)</u>	<u>(35,722)</u>	<u>(7,671)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:			
Payments to noncontrolling interests holders	(4,489)	(3,529)	(3,842)
Capital contributions from minority investor	524	918	—
Treasury stock acquired	(21,855)	—	(4,709)
Net cash used in financing activities	<u>(25,820)</u>	<u>(2,611)</u>	<u>(8,551)</u>
NET (DECREASE) INCREASE IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH			
CASH	(2,530)	2,636	52,887
CASH, CASH EQUIVALENTS AND RESTRICTED CASH-Beginning of year	191,342	188,706	135,819
CASH, CASH EQUIVALENTS AND RESTRICTED CASH-End of year	<u>\$ 188,812</u>	<u>\$ 191,342</u>	<u>\$ 188,706</u>
Non cash financing activities-Equity awards issued	\$ 1,473	\$ 1,195	\$ 1,095
Non cash financing activities-Equity awards accrued	\$ 487	\$ 1,485	\$ 1,217
Non cash investing activities-Accrued capital expenditures	\$ —	\$ 1,149	\$ 342
Reconciliation of total cash, cash equivalents and restricted cash:			
Cash and cash equivalents	\$ 188,531	\$ 190,988	\$ 188,576
Restricted cash	281	354	130
Total cash, cash equivalents and restricted cash	<u>\$ 188,812</u>	<u>\$ 191,342</u>	<u>\$ 188,706</u>

See notes to consolidated financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation – The accompanying financial statements consolidate the operating results and financial position of REX American Resources Corporation and its wholly-owned and majority owned subsidiaries (the “Company” or “REX”). All intercompany balances and transactions have been eliminated. As of January 31, 2019, the Company owns interests in five operating entities – four are consolidated and one is accounted for using the equity method of accounting. The results of One Earth are included on a delayed basis of one month lag as One Earth has a fiscal year end of December 31. The other consolidated entities have the same fiscal year end as the parent company.

Fiscal Year – All references in these consolidated financial statements to a particular fiscal year are to the Company’s fiscal year ended January 31. For example, “fiscal year 2018” means the period February 1, 2018 to January 31, 2019. The Company refers to its fiscal year by reference to the year immediately preceding the January 31 fiscal year end date.

Segments – In fiscal year 2017, the Company began reporting the results of its refined coal operation as a new segment as a result of the August 10, 2017 acquisition of an entity that operates a refined coal facility (see Note 4). Prior to the acquisition, the Company had one reportable segment, ethanol. Beginning with the third quarter of fiscal year 2017, the Company has two reportable segments: i) ethanol and by-products and ii) refined coal. Within the ethanol and by-products segment, the Company has equity investments in three ethanol limited liability companies, two of which are majority ownership interests. Within the refined coal segment, the Company has a majority equity interest in one refined coal limited liability company.

In applying the criteria set forth in ASC 280, the Company determined that based on the nature of the products and production process and the expected financial results, the Company’s operations at its ethanol plants are aggregated into one reporting segment.

Use of Estimates – The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash Equivalents – Cash equivalents are principally short-term investments with original maturities of less than three months. The carrying amount of cash equivalents approximates fair value.

Basis of Presentation—Interest and other income, net includes the following (amounts in thousands):

	Fiscal Year 2018	Fiscal Year 2017	Fiscal Year 2016
Interest income	\$ 3,514	\$ 1,556	\$ 434
(Loss) gain on sale of investment	—	(13)	192
(Loss) gain on disposal of real estate and property and equipment, net	(104)	(192)	328
Other	(22)	709	162
Total	<u>\$ 3,388</u>	<u>\$ 2,060</u>	<u>\$ 1,116</u>

Concentrations of Risk—The Company maintains cash and cash equivalents in accounts with financial institutions which exceed federally insured limits. The Company has not experienced any losses in such accounts. The Company does not believe there is significant credit risk related to its cash and cash equivalents. Six (fiscal years 2018 and 2017) and five (fiscal year 2016) customers accounted for approximately 85%, 87% and 83% of the Company's net sales and revenue during fiscal years 2018, 2017 and 2016, respectively. At January 31, 2019 and 2018, these customers represented approximately 80% and 89%, respectively, of the Company's accounts receivable balance.

Inventory—Inventories are carried at the lower of cost or market on a first-in, first-out basis. Inventory includes direct production costs and certain overhead costs such as depreciation, property taxes and utilities related to producing ethanol and related by-products and refined coal. Inventory is permanently written down for instances when cost exceeds estimated net realizable value; such write-downs are based primarily upon commodity prices as the market value of inventory is often dependent upon changes in commodity prices. There was no significant write-down of inventory during fiscal years 2018, 2017 or 2016. Fluctuations in the write-down of inventory generally relate to the levels and composition of such inventory at a given point in time and commodity prices. The components of inventory are as follows (amounts in thousands):

	January 31,	
	2019	2018
Ethanol and other finished goods	\$ 5,767	\$ 8,402
Work in process	3,094	2,824
Grain and other raw materials	<u>9,616</u>	<u>9,529</u>
Total	<u>\$ 18,477</u>	<u>\$ 20,755</u>

Property and Equipment – Property and equipment is recorded at cost or the fair value on the date of acquisition (for property and equipment acquired in a business combination). Depreciation is computed using the straight-line method. Estimated useful lives are 5 to 40 years for buildings and improvements, and 2 to 20 years for fixtures and equipment. The components of property and equipment are as follows (amounts in thousands):

	January 31,	
	2019	2018
Land and improvements	\$ 21,469	\$ 21,074
Buildings and improvements	23,608	23,272
Machinery, equipment and fixtures	297,807	288,832
Construction in progress	708	3,155
	<u>343,592</u>	<u>336,333</u>
Less: accumulated depreciation	<u>(161,071)</u>	<u>(138,506)</u>
Total	<u><u>\$ 182,521</u></u>	<u><u>\$ 197,827</u></u>

In accordance with ASC 360-05 “*Impairment or Disposal of Long-Lived Assets*”, the carrying value of long-lived assets is assessed for recoverability by management when changes in circumstances indicate that the carrying amount may not be recoverable.

The Company tests for recoverability of an asset group by comparing its carrying amount to its estimated undiscounted future cash flows. If the carrying amount exceeds its estimated undiscounted future cash flows, the Company recognizes an impairment charge for the amount by which the asset group’s carrying amount exceeds its fair value, if any. The Company recorded no impairment charges in fiscal years 2018, 2017 and 2016.

Depreciation expense was approximately \$24,828,000, \$21,462,000 and \$19,519,000 in fiscal years 2018, 2017 and 2016, respectively.

Investments – The method of accounting applied to long-term investments, whether consolidated, equity or cost, involves an evaluation of the significant terms of each investment that explicitly grant or suggest evidence of control or influence over the operations of the investee and also includes the identification of any variable interests in which the Company is the primary beneficiary. The Company accounts for investments in limited liability companies in which it may have a less than 20% ownership interest, using the equity method of accounting when the factors discussed in ASC 323 are met. The excess of the carrying value over the underlying equity in the net assets of equity method investees is allocated to specific assets and liabilities. Investments in businesses that the Company does not control but for which it has the ability to exercise significant influence over operating and financial matters are accounted for using the equity method. The Company accounts for its investment in Big River using the equity method of accounting and includes the results of Big River on a delayed basis of one month as it has a fiscal year end of December 31.

The Company periodically evaluates its investments for impairment due to declines in market value considered to be other than temporary. Such impairment evaluations include, in addition to persistent, declining market prices, general economic and company-specific evaluations. If the Company determines that a decline in market value is other than temporary, then a charge to earnings is recorded in the Consolidated Statements of Operations and a new cost basis in the investment is established.

Short-term investments, consisting of U.S. government obligations, are considered held-to-maturity, and, therefore are carried at amortized historical cost.

Revenue Recognition – For ethanol and by-products segment sales, the Company recognizes sales of ethanol, distillers grains and non-food grade corn oil when obligations under the terms of the respective contracts with customers are satisfied; this occurs with the transfer of control of products, generally upon shipment from the ethanol plant or upon loading of the rail car used to transport the products. For refined coal segment sales, the Company recognizes sales of refined coal when obligations under the term of the contract with its customer are satisfied; this occurs when control of the product transfers to the customer, generally upon the coal leaving the refined coal plant. Refined coal sales are recorded net of the cost of coal as the Company purchases the coal feedstock from the customer to which refined coal is sold (after processing).

Cost of Sales – Cost of sales includes depreciation, costs of raw materials, inbound freight charges, purchasing and receiving costs, inspection costs, shipping costs, other distribution expenses, warehousing costs, plant management, certain compensation costs and general facility overhead charges.

Selling, General and Administrative Expenses – The Company includes non-production related costs such as professional fees, selling charges and certain payroll in selling, general and administrative expenses.

Financial Instruments – Certain of the forward grain purchase and ethanol, distillers grains and non-food grade corn oil sale contracts are accounted for under the “normal purchases and normal sales” scope exemption of ASC 815, because these arrangements are for purchases of grain that will be delivered in quantities expected to be used and sales of ethanol, distillers grains and non-food grade corn oil that will be produced in quantities expected to be sold by us over a reasonable period of time in the normal course of business. During the years ended January 31, 2019, 2018 and 2017 there were no material settlements of forward contracts that were recorded at fair value. At January 31, 2019, the company recorded a liability of \$21,000 associated with contracts not accounted for under the “normal purchases and normal sales” scope exemption of ASC 815. At January 31, 2018, the Company recorded an asset of approximately \$0.1 million associated with contracts not accounted for under the “normal purchases and normal sales” scope exemption of ASC 815.

The Company uses derivative financial instruments (exchange-traded futures contracts) to manage a portion of the risk associated with changes in commodity prices, primarily related to corn. The Company monitors and manages this exposure as part of its overall risk management policy. As such, the Company seeks to reduce the potentially adverse effects that the volatility of these markets may have on its operating results. The Company may take hedging positions in these commodities as one way to mitigate risk. While the Company attempts to link its hedging activities to purchase and sale activities, there are situations in which these hedging activities can themselves result in losses. The Company does not hold or issue derivative financial instruments for trading or speculative purposes. The changes in fair value of these derivative financial instruments are recognized in current period earnings as the Company does not use hedge accounting.

Stock Compensation – The Company has a stock-based compensation plan, approved by its shareholders, which reserves a total of 550,000 shares of common stock for issuance pursuant to its terms. The plan provides for the granting of shares of stock, including options to purchase shares of common stock, stock appreciation rights tied to the value of common stock, restricted stock, and restricted stock unit awards to eligible employees, non-employee directors and consultants. The Company measures share-based compensation grants at fair value on the grant date, adjusted for estimated forfeitures. The Company records noncash compensation expense related to equity and liability awards in its consolidated financial statements over the requisite service period on a straight-line basis. See Note 12 for a further discussion of restricted stock.

Income Taxes – The Company provides for deferred tax liabilities and assets for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. The Company provides for a valuation allowance if, based on the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. The Company’s annual effective tax rate includes the impact of its refined coal operation and the expected federal income tax credits to be earned and the impact of research and experimentation credits. In addition, for fiscal year 2017, the Company’s annual effective tax rate includes a benefit related to remeasuring deferred tax liabilities at a federal income tax rate of 21% compared to 35% in historical periods, a result of the Tax Act, which reduced the federal income tax rate on corporations from 35% to 21%.

Comprehensive Income – The Company has no components of other comprehensive income, and therefore, comprehensive income equals net income.

New Accounting Pronouncements – Effective February 1, 2018, the Company adopted the amended guidance in ASC Topic 606 “*Revenue from Contracts with Customers*”, which requires revenue recognition to reflect the transfer of promised goods or services to customers and replaces existing revenue recognition guidance. See Note 3 for a discussion of the adoption of this amended guidance.

Effective February 1, 2018, the Company prospectively adopted Accounting Standards Update “ASU” 2016-15 “*Statement of Cash Flows (Topic 230), Classification of Certain Cash Receipts and Cash Payments*”. This standard provides guidance on eight specific cash flow issues. The cash flow issues covered by this ASU are: 1) debt prepayment or debt extinguishment costs; 2) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; 3) contingent consideration payments made after a business combination; 4) proceeds from the settlement of insurance claims; 5) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies; 6) distributions received from equity method investees; 7) beneficial interests in securitization transactions; and 8) separately identifiable cash flows and application of the predominance principle for distributions received from equity method investees in the Statement of Cash Flows. The adoption of this standard did not affect the consolidated financial statements and related disclosures.

Effective February 1, 2018, the Company adopted ASU 2016-18 “*Statement of Cash Flows (Topic 230), Restricted Cash*”. This standard requires that the statements of cash flows explain the changes in the combined total of restricted and unrestricted cash balances. Amounts generally described as restricted cash will be combined with unrestricted cash and cash equivalents when reconciling the beginning and end of period balances on the statements of cash flows. The Company adopted this standard retrospectively. Therefore, the balance of cash and cash equivalents was increased by \$354,000 and \$130,000 as of January 31, 2018 and 2017, respectively to reflect the respective restricted cash amounts. Net cash used in investing activities was adjusted to exclude the change in restricted cash of \$224,000 and \$76,000 for the years ended January 31, 2018 and 2017, respectively.

In February 2016, the Financial Accounting Standards Board (“FASB”) issued ASU 2016-02 “*Leases (Codified as Topic 842)*”. This standard requires that virtually all leases will be recognized by lessees on their balance sheet as a right-of-use asset and a corresponding lease liability, including leases currently accounted for as operating leases. The Company is required to adopt this standard effective February 1, 2019. The related leases are currently accounted for as operating leases (see Note 8). This standard requires a modified retrospective transition approach and allows for early adoption. This standard provides three practical expedients, which the Company intends to elect as a package and apply consistently to all leases. Pursuant to this package, the Company will not reassess i) whether any expired or existing contracts are or contain leases, ii) the lease classification for any expired or existing leases

that were previously classified as operating leases, or iii) initial direct costs for any existing leases. In July 2018, the FASB issued ASU 2018-11, Leases (Topic 842): *Targeted Improvements*, which provides an option to apply the transition provisions of the new standard at the adoption date instead of the earliest comparative period presented in the financial statements. The Company will elect to use this optional transition method.

The Company expects the adoption of this new standard to result in the recognition of a range of approximately \$18 million to \$22 million in right-of-use assets and lease liabilities on the Consolidated Balance Sheet. The Company does not expect the adoption of this new standard to have a material impact on its Consolidated Statements of Operations Cash Flows or Shareholders' Equity. The Company expects to use the lessee non-lease component accounting policy election, for all asset classes, to include both the lease and non-lease components as a single component and account for them as a lease.

The Company is currently working to complete the implementation of new processes and information technology tools to assist in ongoing lease data collection and analysis, and is updating accounting policies and internal controls in connection with the adoption of the new standard.

2. INVESTMENTS

The Company's equity method investment in Big River is accounted for under ASC 323. The following table summarizes the investment (amounts in thousands):

	<u>January 31, 2019</u>	<u>January 31, 2018</u>
Carrying amount	\$ 32,075	\$ 34,549
Ownership percentage	10.3%	10.3%

The Company invested \$20.0 million in Big River which is a holding company for several entities. Big River, through its various entities (both wholly and partially owned), operates four ethanol manufacturing facilities, that combined shipped approximately 428.6 million gallons of ethanol in the twelve months ended January 31, 2019. The Company recorded income of approximately \$1.5 million, \$3.2 million and \$6.1 million as its share of earnings from Big River during fiscal years 2018, 2017 and 2016, respectively. The Company received dividends of approximately \$4.0 million, \$6.5 million and \$7.0 million from Big River during fiscal years 2018, 2017 and 2016, respectively. At January 31, 2019, the carrying value of the investment in Big River is approximately \$32.1 million; the amount of underlying equity in the net assets of Big River is approximately \$28.3 million.

Summarized financial information for the Company's equity method investee as of and for its fiscal year end is presented in the following tables (amounts in thousands):

Big River				
	December 31, 2018		December 31, 2017	
Current assets	\$	117,796	\$	149,436
Non current assets		241,382		261,443
Total assets	\$	359,178	\$	410,879
Current liabilities	\$	50,172	\$	49,130
Long-term liabilities		701		10,599
Total liabilities	\$	50,873	\$	59,729
Noncontrolling interests	\$	34,149	\$	38,412

Big River	Years Ended December 31,		
	2018	2017	2016
Net sales and revenue	\$ 802,523	\$ 817,112	\$ 851,434
Gross profit	\$ 33,782	\$ 60,259	\$ 88,841
Income from continuing operations	\$ 14,893	\$ 32,243	\$ 63,292
Net income	\$ 14,893	\$ 32,243	\$ 63,292

Big River has debt agreements that limit and restrict amounts the entity can pay in the form of dividends or advances to owners. The restricted net assets of Big River at January 31, 2019 are approximately \$185.1 million; the Company's proportionate share of restricted net assets of Big River is approximately \$19.1 million.

The following table summarizes the Company's held-to-maturity security at January 31, 2019 (amounts in thousands):

	Amortized Cost	Gross Unrealized Losses	Estimated Fair Value
United States Treasury Bill	\$ 14,975	\$ 2	\$ 14,973

As of January 31, 2019, the contractual maturity of this investment was less than one year. The yield to maturity rate is 2.29%.

The Company had no held-to-maturity investments as of January 31, 2018.

3. NET SALES AND REVENUE

On February 1, 2018, the Company adopted the amended guidance in ASC Topic 606, "Revenue from Contracts with Customers", and all related amendments and applied it to all contracts utilizing the modified retrospective method. There were no adjustments to the Consolidated Condensed Balance Sheet as of February 1, 2018 as a result of the adoption of this accounting guidance. Therefore, comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. Furthermore, there was no impact related to the adoption of this

accounting guidance on the Consolidated Statements of Operations or Balance Sheets for the year ended January 31, 2019. The Company expects the impact of adopting this accounting guidance to be immaterial on an ongoing basis.

The Company recognizes sales of products when obligations under the terms of the respective contracts with customers are satisfied. This occurs with the transfer of control of products, generally upon shipment from the ethanol plant or upon loading of the rail car used to transport the products. Revenue is measured as the amount of consideration expected to be received in exchange for transferring goods. Sales, value add and other taxes the Company collects concurrent with revenue producing activities are excluded from net sales and revenue.

The majority of the Company's sales have payment terms ranging from 5 to 10 days after transfer of control. The Company has determined that sales contracts do not generally include a significant financing component. The Company has not historically, and does not intend to, enter into sales contracts in which payment is due from a customer prior to transferring product to the customer. Thus, the Company does not record unearned revenue.

The Company elected, pursuant to the new accounting guidance, to recognize as fulfillment activities the cost for shipping and handling activities that occur after the customer obtains control of the promised goods and not when performance obligations are met. See Note 16 for disaggregation of net sales and revenue by operating segment and by product.

4. BUSINESS COMBINATIONS

On August 10, 2017, the Company, through a 95.35% owned subsidiary, purchased the entire ownership interest of an entity that owns a refined coal facility. The Company began operating its refined coal facility immediately after the acquisition. The Company expects that the refined coal operating results will be subsidized by federal production tax credits through November 2021, subject to meeting qualified emissions reductions and other requirements as governed by Section 45 of the Internal Revenue Code.

The results of the Company's refined coal operations (approximately \$1.2 million of net sales and revenue and approximately \$15.8 million of net income attributable to REX common shareholders, including the income tax benefit of estimated Section 45 credits to be earned) have been included in the consolidated financial statements subsequent to the acquisition date and are included in the Company's refined coal segment. Pro forma net sales and revenue and net income attributable to REX common shareholders, had the acquisition occurred on February 1, 2017 would have been \$452.6 million and \$38.9 million, respectively for the year ended January 31, 2018.

The purchase price was \$12,049,000, which was paid in cash. The acquisition was recorded by allocating the total purchase price to the assets acquired, based on their estimated fair values at the acquisition date. The income approach was used to determine the fair values of assets acquired. The following table summarizes the estimated fair values of the assets acquired at the acquisition date (amounts in thousands):

Inventory	\$ 49
Property, plant and equipment	12,000
Total assets acquired and purchase price	<u>\$ 12,049</u>

Transaction costs totaled approximately \$2.5 million during fiscal year 2017 and are included in selling, general and administrative expenses in the Consolidated Statement of Operations.

5. FAIR VALUE

The Company applies ASC 820, “*Fair Value Measurements and Disclosures*” (“ASC 820”) which defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

The Company determines the fair market values of its financial instruments based on the fair value hierarchy established by ASC 820, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair values which are provided below. The Company carries certain cash equivalents, investments and derivative financial instruments at fair value.

Level 1 – Quoted prices in active markets for identical assets or liabilities. Level 1 assets and liabilities include debt and equity securities and derivative contracts that are traded in an active exchange market, as well as certain U.S. Treasury securities that are highly liquid and are actively traded in over-the-counter markets.

Level 2 – Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 2 assets and liabilities include derivative contracts whose value is determined using a pricing model with inputs that are observable in the market or can be derived principally or corroborated by observable market data.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methods, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation. Unobservable inputs are developed based on the best information available, which may include the Company’s own data.

The fair values of derivative assets and liabilities traded in the over-the-counter market are determined using quantitative models that require the use of multiple market inputs including interest rates, prices and indices to generate pricing and volatility factors, which are used to value the position. The predominance of market inputs are actively quoted and can be validated through external sources, including brokers, market transactions and third-party pricing services. Estimation risk is greater for derivative asset and liability positions that are either option-based or have longer maturity dates where observable market inputs are less readily available or are unobservable, in which case interest rate, price or index scenarios are extrapolated in order to determine the fair value. The fair values of derivative assets and liabilities include adjustments for market liquidity, counterparty credit quality, the Company’s own credit standing and other specific factors, where appropriate. The fair values of property and equipment are determined by using various models that discount future expected cash flows.

To ensure the prudent application of estimates and management judgment in determining the fair value of derivative assets and liabilities and property and equipment, various processes and controls have been adopted, which include: (i) model validation that requires a review and approval for pricing, financial statement fair value determination and risk quantification; and (ii) periodic review and substantiation of profit and loss reporting for all derivative instruments. Financial assets and liabilities measured at fair value at January 31, 2019 on a recurring basis are summarized below (amounts in thousands):

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	Total Fair Value
Commodity futures (3)	\$ —	\$ 44	\$ —	\$ 44
Investment in cooperative (1)	—	—	333	333
Total assets	<u>\$ —</u>	<u>\$ 44</u>	<u>\$ 333</u>	<u>\$ 377</u>
Forward purchase contracts liability (5)	<u>\$ —</u>	<u>\$ 22</u>	<u>\$ —</u>	<u>\$ 22</u>

Financial assets and liabilities measured at fair value at January 31, 2018 on a recurring basis are summarized below (amounts in thousands):

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	Total Fair Value
Forward purchase contracts asset (4)	\$ —	\$ 72	\$ —	\$ 72
Investment in cooperative (1)	—	—	333	333
Total assets	<u>\$ —</u>	<u>\$ 72</u>	<u>\$ 333</u>	<u>\$ 405</u>
Commodity futures (5)	\$ —	\$ 87	\$ —	\$ 87
Forward purchase contracts liability (2)	—	34	—	34
Total liabilities	<u>\$ —</u>	<u>\$ 121</u>	<u>\$ —</u>	<u>\$ 121</u>

- (1) The investment in cooperative is included in “Other assets” on the accompanying Consolidated Balance Sheets.
- (2) The forward purchase contract liability is included in “Accrued expenses and other current liabilities” on the accompanying Consolidated Balance Sheets.
- (3) The commodity futures asset is included in “Prepaid expenses and other” on the accompanying Consolidated Balance Sheets.
- (4) The forward purchase contract asset is included in “Prepaid expenses and other” on the accompanying Consolidated Balance Sheets.
- (5) The commodity futures liability is included in “Accrued expenses and other current liabilities” on the accompanying Consolidated Balance Sheets.

The Company determined the fair value of the investment in cooperative by using a discounted cash flow analysis on the expected cash flows. Inputs used in the analysis include the face value of the allocated equity amount, the projected term for repayment based upon a historical trend, and a risk adjusted discount rate based on the expected compensation participants would demand because of the uncertainty of the future cash flows. The inherent risk and uncertainty associated with unobservable inputs could have a significant effect on the actual fair value of the investment.

No other financial instruments were elected to be measured at fair value in accordance with ASC 470-20-25-21.

There were no assets measured at fair value at January 31, 2019 and 2018 on a non-recurring basis. As discussed in Note 4, the Company estimated the fair values of refined coal assets acquired using the income approach. This estimated fair value is a level 3 measurement.

6. OTHER ASSETS

The components of other noncurrent assets are as follows (amounts in thousands):

	January 31,	
	2019	2018
Deferred taxes	\$ 5,843	\$ —
Real estate taxes refundable	—	6,719
Other	333	735
	<u>6,176</u>	<u>7,454</u>
Total	\$ 6,176	\$ 7,454

Real estate taxes refundable represent amounts due One Earth associated with refunds of previously paid taxes in connection with a tax increment financing arrangement with local taxing authorities.

7. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

The components of accrued expenses and other current liabilities at January 31, 2019 and 2018 are as follows (amounts in thousands):

	January 31,	
	2019	2018
Accrued payroll and related items	\$ 2,041	\$ 5,108
Accrued utility charges	2,924	2,639
Accrued transportation related items	1,567	1,561
Accrued real estate taxes	1,680	2,678
Accrued income taxes	71	61
Other	1,263	1,669
	<u>9,546</u>	<u>13,716</u>
Total	\$ 9,546	\$ 13,716

8. LEASES

At January 31, 2019, the Company has lease agreements, as lessee, for rail cars and other equipment. All of the leases are accounted for as operating leases. As of January 31, 2019, future minimum annual rentals on such leases are as follows (amounts in thousands):

<u>Years Ended</u> <u>January 31,</u>	<u>Minimum</u> <u>Rentals</u>
2019	6,767
2020	5,487
2021	4,791
2022	3,208
2023	2,041
Thereafter	1,221
	<u>\$ 23,515</u>

9. COMMON STOCK

During fiscal years 2018 and 2016, the Company purchased 305,473 shares and 87,904 shares, respectively, of its common stock for approximately \$21,856,000 and \$4,353,000, respectively. During fiscal year 2017, the Company did not purchase any of its common stock. At January 31, 2019, the Company had prior authorization by its Board of Directors to purchase, in open market transactions, an additional 349,861 shares of its common stock. Information regarding the Company's common stock is as follows (amounts in thousands):

	<u>January 31,</u>	
	<u>2019</u>	<u>2018</u>
Authorized shares	45,000	45,000
Issued shares	29,853	29,853
Outstanding shares	6,274	6,566

10. REVOLVING LINES OF CREDIT

One Earth and NuGen each have \$10.0 million revolving loan facilities that mature June 1, 2019. Any borrowings will be secured by the inventory and accounts receivable of One Earth or NuGen, specific to which entity borrows money under these facilities. These revolving loan facilities are recourse only to One Earth and NuGen, respectively, and not to REX American Resources Corporation or any of its other subsidiaries. Borrowings under these facilities bear interest at the one month LIBOR rate plus 225 basis points. Neither One Earth nor NuGen had outstanding borrowings on the revolving loans during the years ended January 31, 2019 or 2018.

11. DERIVATIVE FINANCIAL INSTRUMENTS

The Company is exposed to various market risks, including changes in commodity prices (raw materials and finished goods). To manage risks associated with the volatility of these natural business exposures, the Company enters into commodity agreements and forward purchase (corn) and sale (ethanol, distillers grains and non-food grade corn oil) contracts. The Company does not purchase or sell derivative financial instruments for trading or speculative purposes. The Company does not purchase or sell derivative financial instruments for which a lack of marketplace quotations would require the use of fair value estimation techniques. The changes in fair value of these derivative financial instruments are recognized in current period earnings as the Company does not use hedge accounting.

The following table provides information about the fair values of the Company's derivative financial instruments and the line items on the Consolidated Balance Sheets in which the fair values are reflected (in thousands):

	Asset Derivatives Fair Value at January 31,		Liability Derivatives Fair Value at January 31,	
	2019	2018	2019	2018
Commodity futures (1)	\$ 44	\$ —	\$ —	\$ 87
Forward purchase contracts (2)	\$ —	\$ 72	\$ 22	\$ 34

- (1) Commodity futures assets are included in prepaid expense and other. Commodity futures liabilities are included in accrued expenses and other current liabilities. These contracts are short/sell positions for approximately 2.0 million bushels of corn at January 31, 2019. These contracts are short/sell positions for approximately 2.5 million bushels of corn and approximately 2.8 million gallons of ethanol and long/buy positions for approximately 2.8 million gallons of ethanol at January 31, 2018.
- (2) Forward purchase contracts liabilities are included in accrued expenses and other current liabilities while forward purchase contracts assets are included in prepaid expenses and other. These contracts are for purchases of approximately 1.3 million bushels of corn at January 31, 2019 and 11.7 million bushels of corn at January 31, 2018.

As of January 31, 2019 and 2018, all of the derivative financial instruments held by the Company were subject to enforceable master netting arrangements. The Company's accounting policy is to offset positions owed or owing with the same counterparty. As of January 31, 2019 and 2018, the gross positions of the enforceable master netting agreements are not significantly different from the net positions presented in the table above. Depending on the amount of an unrealized loss on a derivative contract held by the Company, the counterparty may require collateral to secure the Company's derivative contract position. As of January 31, 2019, the Company was required to maintain collateral with the counterparty in the amount of approximately \$281,000 to secure the Company's derivative liability position. See Note 5 which contains fair value information related to derivative financial instruments.

The Company recognized gains (included in cost of sales) on derivative financial instruments of approximately \$2,698,000, \$1,317,000 and \$2,131,000 in fiscal years 2018, 2017 and 2016, respectively.

12. EMPLOYEE BENEFITS

The Company maintains the REX 2015 Incentive Plan, approved by its shareholders, which reserves a total of 550,000 shares of common stock for issuance pursuant to its terms. The plan provides for the granting of shares of stock, including options to purchase shares of common stock, stock appreciation rights tied to the value of common stock, restricted stock, and restricted stock unit awards to eligible employees, non-employee directors and consultants. The Company measures share-based compensation grants at fair value on the grant date, adjusted for estimated forfeitures. The Company records noncash compensation expense related to liability and equity awards in its consolidated financial statements over the requisite service period on a straight-line basis. At January 31, 2019, 489,430 shares remain available for issuance under the Plan. As a component of their compensation, restricted stock has been granted to directors at the market price of REX common stock on the date of the grant. In addition one third of executives' incentive compensation is payable by an award of restricted stock based on the then market

price of REX common stock. The Company's board of directors has determined that the grant date will be June 15th, or the next business day, for all grants of restricted stock.

At January 31, 2019 and 2018, unrecognized compensation cost related to nonvested restricted stock was approximately \$200,000 and \$233,000, respectively. The following table summarizes non-vested restricted stock award activity for fiscal years 2018, 2017 and 2016:

	2018		
	Non-Vested Shares	Weighted Average Grant Date Fair Value (000's)	Weighted Average Remaining Vesting Term (in years)
Non-Vested at January 31, 2018	29,415	\$ 2,275	2
Granted	21,744	1,623	
Forfeited	—	—	
Vested	13,123	963	
Non-Vested at January 31, 2019	<u>38,036</u>	<u>\$ 2,935</u>	2
	2017		
	Non-Vested Shares	Weighted Average Grant Date Fair Value (000's)	Weighted Average Remaining Vesting Term (in years)
Non-Vested at January 31, 2017	23,350	\$ 1,386	2
Granted	14,156	1,370	
Forfeited	—	—	
Vested	8,091	481	
Non-Vested at January 31, 2018	<u>29,415</u>	<u>\$ 2,275</u>	2
	2016		
	Non-Vested Shares	Weighted Average Grant Date Fair Value (000's)	Weighted Remaining Vesting Vesting Term (in years)
Non-Vested at January 31, 2016	3,168	\$ 200	2
Granted	21,502	1,269	
Forfeited	—	—	
Vested	1,320	83	
Non-Vested at January 31, 2017	<u>23,350</u>	<u>\$ 1,386</u>	2

The above tables include 34,148, 24,711 and 18,541 non-vested shares at January 31, 2019, 2018 and 2017, respectively, which are included in the number of weighted average shares outstanding used to determine basic and diluted earnings per share attributable to REX common shareholders. Such shares are treated, for accounting purposes, as being fully vested at the grant date as they were granted to officers who were retirement eligible at the time of grant.

13. COMMITMENTS

One Earth and NuGen have combined forward purchase contracts for approximately 13.0 million bushels of corn, the principal raw material for their ethanol plants. They expect to take delivery of a majority of the corn through June 2019.

One Earth and NuGen have combined sales commitments for approximately 32.3 million gallons of ethanol, 88,000 tons of distillers grains and 18.2 million pounds of non-food grade corn oil. They expect to deliver the ethanol, distillers grains and corn oil through March 2019.

One Earth has entered into an agreement with an unrelated party for the use of a portion of the party's natural gas pipeline. The term of the agreement is 10 years, and the amount is \$4,380,000, which is paid over 120 equal monthly installments of \$36,500 beginning in February 2009. A 15 year agreement, with monthly payments of \$29,250 will be effective February 1, 2019. One Earth paid approximately \$438,000 pursuant to the agreement in each of fiscal years 2018, 2017 and 2016.

One Earth and NuGen have entered into agreements with unrelated parties for the lease of railcars used to ship ethanol and distillers grains. These leases expire on various dates through February 1, 2025. One Earth and NuGen pay a monthly lease amount per railcar. One Earth and NuGen incurred combined expenses of approximately \$8,109,000, \$8,600,000 and \$8,515,000 pursuant to the leases in fiscal years 2018, 2017 and 2016, respectively.

One Earth and NuGen each have a contract with an unrelated party ("Distillers Grains Marketers") for distillers grains marketing services. Under the terms of the contracts, the Distillers Grains Marketers will purchase all of One Earth's and NuGen's distillers grains production during the term of the contracts. The contracts call for One Earth and NuGen to pay a fee per ton of distillers grains for the Distillers Grains Marketers' services. The terms of the agreements are for one year and shall renew automatically for additional one year terms, unless either party sends notice to the other party of its intent to terminate the agreement at least 90 days prior to the expiration of the then current term of the agreement. One Earth and NuGen combined incurred fees of approximately \$1,250,000, \$1,354,000 and \$1,194,000 in fiscal years 2018, 2017 and 2016, respectively, for these marketing services.

One Earth has a grain origination agreement with a minority equity owner, under which it purchased 100% of its grain during fiscal years 2018, 2017 and 2016. Pursuant to this agreement, One Earth pays a procurement fee per bushel. The agreement expires December 31, 2020, and can be terminated prior to the expiration date if either party provides 180 days written notice. The agreement automatically renews for additional one year terms, unless either party sends notice to the other party of its intent to terminate the agreement at least 180 days prior to the expiration of the then current term of the agreement.

The refined coal entity has various agreements (site license, operating agreements, etc.) containing payment terms based upon production of refined coal under which the Company is required to pay various fees. These fees totaled approximately \$9.9 million and \$5.5 million in fiscal years 2018 and 2017, respectively.

14. INCOME TAXES

The (benefit) provision for income taxes for fiscal years 2018, 2017 and 2016 consist of the following (amounts in thousands):

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Federal:			
Current	\$ 81	\$ (2,094)	\$ 12,197
Deferred	<u>(23,547)</u>	<u>(19,528)</u>	<u>3,568</u>
	<u>(23,466)</u>	<u>(21,622)</u>	<u>15,765</u>
State and Local:			
Current	361	1,180	2,153
Deferred	<u>183</u>	<u>923</u>	<u>(525)</u>
	<u>544</u>	<u>2,103</u>	<u>1,628</u>
(Benefit) provision for income taxes	<u>\$ (22,922)</u>	<u>\$ (19,519)</u>	<u>\$ 17,393</u>

The tax effects of significant temporary differences representing deferred tax assets and liabilities are as follows (amounts in thousands):

	January 31,	
	<u>2019</u>	<u>2018</u>
Assets:		
General business credit carryforward	\$ 26,523	\$ 3,897
Accrued liabilities	308	687
State net operating loss carryforward	294	241
Other items	647	576
Valuation allowance	<u>(232)</u>	<u>(241)</u>
Total	<u>27,540</u>	<u>5,160</u>
Liabilities:		
Basis in pass through entities, including depreciation	(25,725)	(26,717)
Other	<u>(157)</u>	<u>(149)</u>
Total	<u>(25,882)</u>	<u>(26,866)</u>
Net deferred tax asset (liability)	<u>\$ 1,658</u>	<u>\$ (21,706)</u>

The Company has a general business credit carryforward of approximately \$26.5 million and approximately \$3.9 million at January 31, 2019 and 2018, respectively. The Company can carry these credits forward for up to twenty years. The carryforward period begins to expire in fiscal year 2037.

The Company has a valuation allowance of approximately \$232,000 and \$241,000 at January 31, 2019 and 2018, respectively. The Company decreased the valuation allowance by \$9,000, \$176,000 and \$734,000 in fiscal years 2018, 2017 and 2016, respectively. These adjustments to the valuation allowance are a result of estimates of realizing certain future state tax benefits.

The Tax Act signed into law on December 22, 2017, reduced the federal corporate income tax rate to 21% effective January 1, 2018. The Tax Act also makes numerous other changes to the U.S. tax code, including, but not limited to, permitting full expensing of qualified property acquired after September 27, 2017, and expanding prior limitations on the deductibility of certain executive compensation.

The SEC issued Staff Account bulleting 118 (“SAB 118”), which provides guidance on accounting for the tax effects of the Tax Act. In recognition of the inherent complexities associated with accounting for the effects of the Tax Act, SAB 118 provides a measurement period of up to one year from enactment of the Tax Act for companies to complete the accounting for the tax effects of the Tax Act. Although the accounting for the tax effects of the Tax Act was not yet complete, at January 31, 2018 the Company made a preliminary estimate of the effect of the tax rate reducing on the existing deferred tax balances and recorded a tax benefit of approximately \$14,362,000 to remeasure the deferred tax liability at the new 21% rate. The Company finalized its analysis in fiscal year 2018, and as a result, recorded a tax provision of approximately \$272,000.

Through its refined coal operation, the Company earns production tax credits pursuant to IRC Section 45. The credits can be used to reduce future income tax liabilities for up to 20 years. These credits increased the income tax benefit by approximately \$21.2 million and \$11.5 million during fiscal years 2018 and 2017, respectively.

During fiscal year 2018, the company recognized an income tax benefit (net of uncertain tax position expense) of approximately \$4.6 million for federal and state research and experimentation credits. These credits recorded during fiscal year 2018 related to fiscal years 2014 to 2017 as well as an estimated tax benefit for fiscal year 2018.

The Company paid income taxes of approximately \$855,000, \$6,920,000 and \$7,090,000 in fiscal years 2018, 2017 and 2016, respectively. The Company received refunds of income taxes of approximately \$1,132,000, \$476,000 and \$150,000 in fiscal years 2018, 2017 and 2016, respectively.

The effective income tax rate on consolidated pre-tax income or loss differs from the federal income tax statutory rate for fiscal years 2018, 2017 and 2016 as follows:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Federal income tax at statutory rate	21.0%	33.8%	35.0%
State and local taxes, net of federal tax benefit	3.6	3.2	2.3
Section 45 production tax credits	(145.2)	(45.4)	—
Research and experimentation credits	(77.8)	—	—
Tax Cuts and Jobs Act	1.9	(56.6)	—
Domestic production activities deduction	—	(5.9)	(2.9)
Uncertain tax positions	47.1	1.4	0.8
Noncontrolling interest	(9.9)	(7.6)	(4.6)
Other	2.2	0.2	—
Total	<u>(157.1)%</u>	<u>(76.9)%</u>	<u>30.6%</u>

The Company files a U.S. federal income tax return and income tax returns in various states. In general, the Company is no longer subject to U.S. federal, state or local income tax examinations by tax authorities for fiscal years ended January 31, 2014 and prior.

The Company applies the provisions of ASC 740-10-25-5 for uncertain tax positions. As of January 31, 2019, total unrecognized tax benefits were approximately \$8,785,000, and accrued penalties and interest were approximately \$447,000. If the Company were to prevail on all unrecognized tax benefits recorded, the provision for income taxes would be reduced by approximately \$8,304,000. In addition, the impact of penalties and interest would also benefit the effective tax rate. Interest and penalties associated with unrecognized tax benefits are recorded within income tax expense.

On a quarterly and annual basis, the Company accrues for the effects of open uncertain tax positions and the related potential penalties and interest. It is reasonably possible that the amount of the unrecognized tax benefit with respect to certain unrecognized tax positions will increase or decrease during the next 12 months; however, the Company does not expect the change to have a material effect on results of operations or financial position. A reconciliation of the beginning and ending amount of unrecognized tax benefits, including interest and penalties, is as follows (dollars in thousands):

	Fiscal Year	
	2018	2017
Unrecognized tax benefits, beginning of year	\$ 2,325	\$ 2,096
Changes for tax positions for prior years	5,973	269
Changes for tax positions for current year	934	(40)
Unrecognized tax benefits, end of year	<u>\$ 9,232</u>	<u>\$ 2,325</u>

15. CONTINGENCIES

The Company is involved in various legal actions arising in the normal course of business. After taking into consideration legal counsels' evaluation of such actions, management is of the opinion that their outcome will not have a material effect on the Company's consolidated financial statements. There were no liabilities recorded at January 31, 2019 or 2018 as the Company did not believe that there was a probable and reasonably estimable loss associated with any legal contingencies.

16. SEGMENT REPORTING

In the third quarter of fiscal year 2017, the Company began reporting the results of its refined coal operations as a new segment as a result of the refined coal acquisition (see Note 3). The Company has two segments: ethanol and by-products and refined coal. Historical amounts have been reclassified to conform to the current year segment reporting presentation. The Company evaluates the performance of each reportable segment based on net income attributable to REX common shareholders. The following tables summarize segment and other results and assets (amounts in thousands):

	<u>2018</u>	<u>Fiscal Year 2017</u>	<u>2016</u>
Net sales and revenue:			
Ethanol and by-products	\$ 485,885	\$ 452,153	\$ 453,799
Refined coal ¹	786	433	—
Total net sales and revenue	<u>\$ 486,671</u>	<u>\$ 452,586</u>	<u>\$ 453,799</u>
Segment gross profit (loss):			
Ethanol and by-products	\$ 43,856	\$ 51,509	\$ 71,039
Refined coal	(13,641)	(7,348)	—
Total gross profit	<u>\$ 30,215</u>	<u>\$ 44,161</u>	<u>\$ 71,039</u>
Income (loss) before income taxes:			
Ethanol and by-products	\$ 31,545	\$ 38,352	\$ 59,447
Refined coal	(15,204)	(10,021)	—
Corporate and other	(1,753)	(2,938)	(2,536)
Total income before income taxes	<u>\$ 14,588</u>	<u>\$ 25,393</u>	<u>\$ 56,911</u>
Benefit (provision) for income taxes:			
Ethanol and by-products	\$ (2,343)	\$ 3,245	\$ (18,259)
Refined coal	24,674	15,168	—
Corporate and other	591	1,106	866
Total benefit (provision) for income taxes	<u>\$ 22,922</u>	<u>\$ 19,519</u>	<u>\$ (17,393)</u>
Segment profit (loss):			
Ethanol and by-products	\$ 23,346	\$ 35,880	\$ 33,950
Refined coal	10,148	5,628	—
Corporate and other	(1,849)	(1,802)	(1,617)
Net income attributable to REX common shareholders	<u>\$ 31,645</u>	<u>\$ 39,706</u>	<u>\$ 32,333</u>

¹ Sales in the refined coal segment are recorded net of the cost of coal as the Company purchases the coal feedstock from the customer to which refined coal is sold.

	<u>2018</u>	<u>Fiscal Year 2017</u>	<u>2016</u>
<u>Sales of products, ethanol and by-products segment:</u>			
Ethanol	\$ 368,319	\$ 359,239	\$ 358,349
Dried distillers grains	85,417	63,120	71,204
Non-food grade corn oil	20,097	21,195	18,518
Modified distillers grains	11,950	8,525	5,326
Other	102	74	402
Total sales	<u>\$ 485,885</u>	<u>\$ 452,153</u>	<u>\$ 453,799</u>
<u>Sales of products, refined coal segment:</u>			
Refined coal	<u>\$ 786</u>	<u>\$ 433</u>	<u>\$ —</u>
<u>Interest income:</u>			
Ethanol and by-products	\$ 2,460	\$ 878	\$ 212
Refined coal	—	—	—
Corporate and other	1,054	678	222
Total interest income	<u>\$ 3,514</u>	<u>\$ 1,556</u>	<u>\$ 434</u>
<u>Depreciation expense:</u>			
Ethanol and by-products	\$ 22,004	\$ 20,037	\$ 19,464
Refined coal	2,784	1,385	—
Corporate and other	40	40	55
Total depreciation expense	<u>\$ 24,828</u>	<u>\$ 21,462</u>	<u>\$ 19,519</u>
<u>Equity in income of unconsolidated affiliates:</u>			
Ethanol and by-products	\$ 1,536	\$ 3,232	\$ 6,144
Refined coal	—	—	—
Corporate and other	—	—	—
Total equity in income of unconsolidated affiliates	<u>\$ 1,536</u>	<u>\$ 3,232</u>	<u>\$ 6,144</u>
<u>(Loss) gain on sale of investment:</u>			
Ethanol and by-products	\$ —	\$ (13)	\$ 192
Refined coal	—	—	—
Corporate and other	—	—	—
Total gain on sale of investment	<u>\$ —</u>	<u>\$ (13)</u>	<u>\$ 192</u>

Assets:	January 31,	
	2019	2018
Ethanol and by-products	\$ 393,691	\$ 384,997
Refined coal	8,625	12,165
Corporate and other	69,077	81,702
Total assets	<u>\$ 471,393</u>	<u>\$ 478,864</u>

Additions to other long lived assets:

Ethanol and by-products	\$ —	\$ 796
Refined coal	—	—
Corporate and other	—	—
Total additions to other long lived assets	<u>\$ —</u>	<u>\$ 796</u>

Additions to property and equipment:

Ethanol and by-products	\$ 10,697	\$ 24,017
Refined coal	78	—
Corporate and other	—	—
Total additions to property and equipment	<u>\$ 10,775</u>	<u>\$ 24,017</u>

All of the Company's ethanol and distillers grains are sold in the domestic market. The Company's customers make all decisions with regard to where products they purchase from the Company are distributed.

17. QUARTERLY UNAUDITED INFORMATION

The following tables set forth the Company's net sales and revenue, gross profit, net income and net income per share (basic and diluted) for each quarter during the last two fiscal years. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included.

	Quarters Ended			
	(In Thousands, Except Per Share Amounts)			
	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019
Net sales and revenue	\$ 120,820	\$ 128,757	\$ 123,750	\$ 113,344
Gross profit	10,851	9,399	7,747	2,218
Net income	10,352	10,490	13,769	2,899
Net income attributable to REX common shareholders	9,496	9,217	11,875	1,057
Basic and diluted net income per share attributable to REX common shareholders	\$ 1.45	\$ 1.43	\$ 1.86	\$ 0.17

	Quarters Ended			
	(In Thousands, Except Per Share Amounts)			
	April 30, 2017	July 31, 2017	October 31, 2017	January 31, 2018
Net sales and revenue	\$ 113,143	\$ 108,744	\$ 121,164	\$ 109,535
Gross profit	12,489	10,781	14,867	6,024
Net income	5,612	4,171	14,994	20,135
Net income attributable to REX common shareholders	4,544	2,941	13,168	19,053
Basic and diluted net income per share attributable to REX common shareholders (a)	\$ 0.69	\$ 0.45	\$ 2.00	\$ 2.89

- a) The total of the quarterly net income per share amounts do not equal the annual net income per share amounts due to the impact of varying amounts of shares outstanding during the year.

18. RELATED PARTIES

During fiscal years 2018, 2017 and 2016, One Earth and NuGen purchased approximately \$176.8 million, \$154.5 million and \$148.5 million, respectively, of corn from minority equity investors. The Company had amounts payable to related parties for corn purchases of approximately \$1.9 million and \$0.9 million at January 31, 2019 and 2018, respectively.

During fiscal years 2018 and 2017, the Company recognized commission expense of approximately \$0.8 million and approximately \$1.8 million, respectively, payable to the minority investor in the refined coal entity. The commission expense is associated with the refined coal acquisition. The Company had accrued liabilities related to the commission expense of approximately \$1.6 million and approximately \$1.5 million at January 31, 2019 and 2018, respectively.

During fiscal years 2018 and 2017, the Company received approximately \$0.5 million and approximately \$0.9 million, respectively, in capital contributions from the minority investor in the refined coal entity.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of REX American Resources Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of REX American Resources Corporation and subsidiaries (the “Company”) as of January 31, 2019 and 2018, the related consolidated statements of operations, shareholders’ equity, and cash flows, for each of the three years in the period ended January 31, 2019, and the related notes and the schedule listed in the Index at Item 15 (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of January 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended January 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of January 31, 2019, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 29, 2019, expressed an unqualified opinion on the Company’s internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

/s/ Deloitte and Touche LLP

Dayton, Ohio
March 29, 2019

We have served as the Company’s auditor since 2002.

REX AMERICAN RESOURCES CORPORATION AND SUBSIDIARIES

Schedule II - VALUATION AND QUALIFYING ACCOUNTS FOR THE YEARS ENDED JANUARY 31, 2019, 2018 AND 2017 (Amounts in thousands)

	Balance Beginning of Year	Additions Charged to Cost and Expenses	Deductions Charges for Which Reserves Were Created	Balance End of Year
2019:				
Deferred tax valuation allowance	\$ 241	\$ —	\$ 9	\$ 232
2018:				
Deferred tax valuation allowance	\$ 417	\$ —	\$ 176	\$ 241
2017:				
Deferred tax valuation allowance	\$ 1,151	\$ —	\$ 734	\$ 417

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management evaluated, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) as of the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective at the reasonable assurance level to ensure that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Our officers concluded that our disclosure controls and procedures are also effective at the reasonable assurance level to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

Material Changes to Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Exchange Act Rule 13a-15(f). Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with accounting principles generally accepted in the United States of America.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems deemed to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Under the supervision and with the participation of our senior management, including our Chief Executive Officer and Chief Financial Officer, we assessed the effectiveness of our internal control over financial reporting as of January 31, 2019 based on the Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based upon this assessment, our management concluded that our internal control over financial reporting was effective as of January 31, 2019 based on those criteria.

The effectiveness of our internal control over financial reporting as of January 31, 2019 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included herein.

/s/ ZAFAR RIZVI Zafar Rizvi	Chief Executive Officer and President (principal executive officer)	March 29, 2019
/s/ DOUGLAS L. BRUGGEMAN Douglas L. Bruggeman	Vice President-Finance, Chief Financial Officer and Treasurer (principal financial and accounting officer)	March 29, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of REX American Resources Corporation

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of REX American Resources Corporation and subsidiaries (the “Company”) as of January 31, 2019, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 31, 2019, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended January 31, 2019, of the Company and our report dated March 29, 2019, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management’s Annual Report on Internal Control Over Financial Reporting*. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed 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. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Dayton, Ohio
March 29, 2019

Item 9B. Other Information

None

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item 10 is incorporated herein by reference to the Proxy Statement for our Annual Meeting of Shareholders on June 12, 2019, except for certain information concerning our executive officers which is set forth in Part I of this report.

Item 11. Executive Compensation

The information required by this Item 11 is set forth in the Proxy Statement for our Annual Meeting of Shareholders on June 12, 2019 and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item 12 is set forth in the Proxy Statement for our Annual Meeting of Shareholders on June 12, 2019 and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions and Director Independence

The information required by this Item 13 is set forth in the Proxy Statement for our Annual Meeting of Shareholders on June 12, 2019 and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The information required by this Item 14 is set forth in the Proxy Statement for our Annual Meeting of Shareholders on June 12, 2019 and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Financial Statements

The following consolidated financial statements of REX American Resources Corporation and subsidiaries are filed as a part of this report at Item 8 hereof.

Consolidated Balance Sheets as of January 31, 2019 and 2018

Consolidated Statements of Operations for the years ended January 31, 2019, 2018 and 2017

Consolidated Statements of Cash Flows for the years ended January 31, 2019, 2018 and 2017

Consolidated Statements of Shareholders' Equity for the years ended January 31, 2019, 2018 and 2017

Notes to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

(a)(2)(i) Financial Statement Schedules

The following financial statement schedules are filed as a part of this report at Item 8 hereof.

Schedule II -Valuation and Qualifying Accounts

All other schedules are omitted because they are not applicable or not required, or because the required information is included in the consolidated financial statements or notes thereto.

(a)(3) Exhibits

See Exhibit Index at page 79 of this report.

Management contracts and compensatory plans and arrangements filed as exhibits to this report are identified by an asterisk in the exhibit index.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

REX AMERICAN RESOURCES CORPORATION

By: /s/ ZAFAR RIZVI
Zafar Rizvi
Chief Executive Officer and President

Date: March 29, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Capacity</u>	<u>Date</u>
/s/ STUART A. ROSE Stuart A. Rose	Executive Chairman of the Board	March 29, 2019
/s/ ZAFAR RIZVI Zafar Rizvi	Chief Executive Officer, President and Director (principal executive officer)	March 29, 2019
/s/ DOUGLAS L. BRUGGEMAN Douglas L. Bruggeman	Vice President-Finance, Chief Financial Officer and Treasurer (principal financial and accounting officer)	March 29, 2019
/s/ EDWARD M. KRESS Edward M. Kress	Director	March 29, 2019
/s/ CHARLES A. ELCAN Charles A. Elcan	Director	March 29, 2019
/s/ DAVID S. HARRIS David S. Harris	Director	March 29, 2019
/s/ MERVYN L. ALPHONSO Mervyn L. Alphonso	Director	March 29, 2019
/s/ LEE FISHER Lee Fisher	Director	March 29, 2019

EXHIBIT INDEX

- (3) *Articles of incorporation and by-laws:*
- 3(a) [Certificate of Incorporation, as amended \(incorporated by reference to Exhibit 3\(a\) to Form 10-Q for quarter ended July 31, 2010, File No. 001-09097\)](#)
 - 3(b) [By-Laws, as amended \(incorporated by reference to Exhibit 3\(a\) to Form 8-K filed June 8, 2015, File No. 001-09097\)](#)
- (10) *Material contracts:*
- 10(a)* [Employment Agreement dated June 2, 2015 between Rex Radio and Television, Inc. and Stuart A. Rose \(incorporated by reference to Exhibit 10\(a\) to Form 8-K filed June 8, 2015, File No. 001-09097\)](#)
 - 10(b)* [Employment Agreement dated June 2, 2015 between Rex Radio and Television, Inc. and Zafar Rizvi \(incorporated by reference to Exhibit 10\(b\) to Form 8-K filed June 8, 2015, File No. 001-09097\)](#)
 - 10(c)* [Employment Agreement dated June 2, 2015 between Rex Radio and Television, Inc. and Douglas L. Bruggeman \(incorporated by reference to Exhibit 10\(c\) to Form 8-K filed June 8, 2015, File No. 001-09097\)](#)
 - 10(d)* [2015 Incentive Plan \(incorporated by reference to Exhibit 10\(d\) to Form 8-K filed June 8, 2015, File No. 001-09097\)](#)
 - 10(e)* [Form of Restricted Stock Award Agreement under 2015 Incentive Plan \(incorporated by reference to Exhibit 10\(e\) to Form 8-K filed June 8, 2015, File No. 001-09097\)](#)
 - 10(f)* [First Amendment to Employment Agreement dated June 2, 2015 between Rex Radio and Television, Inc. and Stuart A. Rose \(incorporated by reference to Exhibit 10\(a\) to Form 10-Q for quarter ended July 31, 2017, File No. 001-09097\)](#)
 - 10(g)* [First Amendment to Employment Agreement dated June 2, 2015 between Rex Radio and Television, Inc. and Zafar Rizvi \(incorporated by reference to Exhibit 10\(b\) to Form 10-Q for quarter ended July 31, 2017, File No. 001-09097\)](#)
 - 10(h)* [First Amendment to Employment Agreement dated June 2, 2015 between Rex Radio and Television, Inc. and Douglas L. Bruggeman \(incorporated by reference to Exhibit 10\(c\) to Form 10-Q for quarter ended July 31, 2017, File No. 001-09097\)](#)

10(i)* Second Amendment to Employment Agreement dated June 2, 2015 between Rex Radio and Television, Inc. and Stuart A. Rose (incorporated by reference to Exhibit 10(k) to Form 10-K for fiscal year ended January 31, 2018, File No. 001-09097)

10(j)* Second Amendment to Employment Agreement dated June 2, 2015 between Rex Radio and Television, Inc. and Zafar Rizvi (incorporated by reference to Exhibit 10(l) to Form 10-K for fiscal year ended January 31, 2018, File No. 001-09097)

10(k)* Second Amendment to Employment Agreement dated June 2, 2015 between Rex Radio and Television, Inc. and Douglas L. Bruggeman (incorporated by reference to Exhibit 10(m) to Form 10-K for fiscal year ended January 31, 2018, File No. 001-09097)

(21) *Subsidiaries of the registrant:*

21 [Subsidiaries of registrant](#)

(23) *Consents of experts and counsel:*

23(a) [Consent of Deloitte & Touche LLP to use its reports dated March 29, 2019 included in this annual report on Form 10-K into registrant's Registration Statement on Form S-8 \(Registration No. 333-205419\)](#)

(31) *Rule 13a-14(a)/15d-14(a) Certifications:*

31 [Certifications](#)

(32) *Section 1350 Certifications:*

32 [Certifications](#)

(101) *Interactive Data File:*

101 The following information from REX American Resources Corporation Annual Report on Form 10-K for the fiscal year ended January 31, 2019, formatted in XBRL: (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Shareholders' Equity, (iv) Consolidated Statements of Cash Flows and (v) Notes to Consolidated Financial Statements.

Copies of the Exhibits not filed herewith may be obtained by writing to Edward M. Kress, Secretary, REX American Resources Corporation, 7720 Paragon Road, Dayton, Ohio 45459.

Those exhibits marked with an asterisk (*) above are management contracts or compensatory plans or arrangements for directors or executive officers of the registrant.