Gevo, Inc.
Form 10-K
April 15, 2014

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

Form 10-K

(Mark One)

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2013

or

¨TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission file number: 001-35073

Gevo, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization)	87-0747704 (I.R.S. Employer Identification No.)
345 Inverness Drive South, Building C, Suite 310,	
Englewood, CO (Address of Principal Executive Offices)	80112 (Zip Code)

(303) 858-8358

(Registrant's telephone number, including area code)

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value $0.01 per share	NASDAQ Global Market

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

None

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

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 x

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 x 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 (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the 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. x

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

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

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

The aggregate market value of the voting stock held by non-affiliates of the registrant, based on the closing sale price of the common stock on June 28, 2013 was approximately $69.3 million. Shares of common stock held by each officer, director and holder of 5% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for

other purposes.

The number of outstanding shares of the registrant's common stock, par value $0.01 per share, as of March 31, 2014 was 68,543,089.

DOCUMENTS INCORPORATED BY REFERENCE

None

GEVO, INC.

FORM 10-K—ANNUAL REPORT

For the Fiscal Year Ended December 31, 2013

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Forward-Looking Statements

When used anywhere in this Annual Report on Form 10-K (this "Report"), the words "expect," "believe," "anticipate," "estimate," "intend," "plan" and similar expressions are intended to identify forward-looking statements. These statements relate to future events or our future financial or operational performance and involve known and unknown risks, uncertainties and other factors that could cause our actual results, levels of activity, performance or achievement to differ materially from those expressed or implied by these forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Such statements are subject to certain risks and uncertainties including those related to the achievement of advances in our technology platform, the success of our retrofit production model, our ability to gain market acceptance for our products, additional competition, changes in economic conditions, and those described in documents we have filed with the Securities and Exchange Commission (the "SEC"), including this Report in "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Risk Factors" and subsequent reports on Form 10-Q. All forward-looking statements in this document are qualified entirely by the cautionary statements included in this document and such other filings. These risks and uncertainties could cause actual results to differ materially from results expressed or implied by forward-looking statements contained in this document. These forward-looking statements speak only as of the date of this document. We disclaim any undertaking to publicly update or revise any forward-looking statements contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based. Unless the context requires otherwise, in this Report the terms "we," "us," "our" and "Company" refer to Gevo, Inc. and its wholly owned and indirect subsidiaries.

This Report contains estimates and other information concerning our target markets that are based on industry publications, surveys and forecasts, including those generated by SRI Consulting, a division of Access Intelligence, LLC ("SRI"), Chemical Market Associates, Inc. ("CMAI"), the U.S. Energy Information Association (the "EIA"), the International Energy Agency (the "IEA"), the Renewable Fuels Association (the "RFA"), and Nexant, Inc. ("Nexant"). Certain target market sizes presented in this Report have been calculated by us (as further described below) based on such information. This information involves a number of assumptions and limitations and you are cautioned not to give undue weight to this information. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors." These and other factors could cause actual results to differ materially from those expressed in these publications, surveys and forecasts.

Conventions that Apply to this Report

With respect to calculation of product market volumes:

product market volumes are provided solely to show the magnitude of the potential markets for isobutanol and the products derived from it. They are not intended to be projections of our actual isobutanol production or sales;
product market volume calculations for fuels markets are based on data available for the year 2011 (the most current data available from the IEA);
product market volume calculations for chemicals markets are based on data available for the year 2012 (the most current data available from Nexant); and
volume data with respect to target market sizes is derived from data included in various industry publications, surveys and forecasts generated by the EIA, the IEA and Nexant.

We have converted these market sizes into volumes of isobutanol as follows:

we calculated the size of the market for isobutanol as a gasoline blendstock and oxygenate by multiplying the world gasoline market volume by an estimated 12.5% by volume isobutanol blend ratio;

we calculated the size of the specialty chemicals markets by substituting volumes of isobutanol equivalent to the volume of products currently used to serve these markets;

- we calculated the size of the petrochemicals and hydrocarbon fuels markets by calculating the amount of isobutanol that, if converted into the target products at theoretical yield, would be needed to fully serve these markets (in substitution for the volume of products currently used to serve these markets); and

for consistency in measurement, where necessary we converted all market sizes into gallons.

Conversion into gallons for the fuels markets is based upon fuel densities identified by Air BP Ltd. and the American Petroleum Institute.

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PART I

Item 1. Business.

Company Overview

We are a renewable chemicals and next generation biofuels company. Our strategy is to commercialize biobased alternatives to petroleum-based products to allow for the optimization of fermentation facilities' assets, with the ultimate goal of maximizing cash flows from the operation of those assets. Our underlying technology uses a combination of synthetic biology, metabolic and chemical engineering and chemistry. We intend to focus primarily on the production and sales of isobutanol and related products from renewable feedstocks. Isobutanol is a four-carbon alcohol that can be sold directly for use as a specialty chemical in the production of solvents, paints and coatings or as a value-added gasoline blendstock. Isobutanol can also be converted into butenes using dehydration chemistry deployed in the refining and petrochemicals industries today. The convertibility of isobutanol into butenes is important because butenes are primary hydrocarbon building blocks used in the production of hydrocarbon fuels, lubricants, polyester, rubber, plastics, fibers and other polymers. We believe that the products derived from isobutanol have potential applications in substantially all of the global hydrocarbon fuels market, representing a potential market for isobutanol of approximately 1,000 billion gallons per year ("BGPY"), and in approximately 40% of the global petrochemicals market, representing a potential market for isobutanol of approximately 70 BGPY. When combined with a potential specialty chemical market for isobutanol of approximately 1.2 BGPY, we believe that the potential global market for isobutanol is greater than 1,100 BGPY.

We believe that products derived from our isobutanol will be drop-in products, which means that our customers will be able to replace petroleum-based intermediate products with renewable isobutanol-based intermediate products without modification to their equipment or production processes. The final products produced from our renewable isobutanol-based intermediate products should be chemically and physically identical to those produced from petroleum-based intermediate products, except that they will contain carbon from renewable sources. Customer interest in our renewable isobutanol is primarily driven by our production route, which we believe will be cost-efficient, and our renewable isobutanol's potential to serve as a cost-effective, environmentally sensitive alternative to the petroleum-based intermediate products that they currently use. We believe that at every step of the value chain, renewable products that are chemically identical to the incumbent petrochemical products will have lower market adoption hurdles in contrast with other bioindustrial products because the infrastructure and applications for such products already exist. In addition, we believe that products made from biobased isobutanol will be subject to less raw material cost volatility than the petroleum-based products in use today because of the lower historical cost volatility of agricultural feedstocks compared to oil.

In order to produce and sell isobutanol made from renewable sources, we have developed the Gevo Integrated Fermentation Technology® ("GIFT®"), an integrated technology platform for the efficient production and separation of renewable isobutanol. GIFT® consists of two components, proprietary biocatalysts that convert sugars derived from multiple renewable feedstocks into isobutanol through fermentation, and a proprietary separation unit that is designed to continuously separate isobutanol during the fermentation process. We developed our technology platform to be compatible with the existing approximately 23 BGPY of global operating ethanol production capacity, as estimated by the RFA.

GIFT® is designed to permit (i) the retrofit of existing ethanol capacity to produce either isobutanol, ethanol or both products simultaneously, or (ii) the addition of renewable isobutanol or ethanol production capabilities to a facility's existing ethanol production by adding additional fermentation capacity side-by-side with the facility's existing ethanol fermentation capacity (collectively referred to as "Retrofit"). Having the flexibility to switch between the production of

isobutanol and ethanol, or produce both products simultaneously, should allow us to optimize asset utilization and cash flows at a facility by taking advantage of fluctuations in market conditions. GIFT® is also designed to allow relatively low capital expenditure Retrofits of existing ethanol facilities, enabling a rapid route to isobutanol production from the fermentation of renewable feedstocks. We believe that our production route will be cost-efficient and will enable rapid deployment of our technology platform and allow our isobutanol and related renewable products to be economically competitive with many of the petroleum-based products used in the chemicals and fuels markets today.

We expect that the combination of our efficient proprietary technology, our marketing focus on providing drop-in substitutes for incumbent petrochemical products and our relatively low capital investment Retrofits will mitigate many of the historical issues associated with the commercialization of renewable chemicals and fuels.

Direct Use Markets

Without modification, isobutanol has applications in the specialty chemical and gasoline blendstock markets. Since our potential customers in these markets would not be required to develop any additional infrastructure to use our isobutanol, we believe that selling into these markets will result in a relatively low risk profile and produce attractive margins.

Specialty Chemicals

Isobutanol has direct applications as a specialty chemical. High-purity and chemical-grade isobutanol can be used as a solvent and chemical intermediate. We plan to produce high-purity and chemical-grade isobutanol that can be used in the existing butanol markets as a cost-effective, environmentally sensitive alternative to petroleum-based products. We believe that our production route will be cost-efficient and will allow for significant expansion of the historical isobutanol markets within existing butanol markets through displacing n-butanol, a related compound to isobutanol that is currently sold into butanol markets.

We estimate the total addressable worldwide market for isobutanol as a specialty chemical to be approximately 1.2 BGPY, or approximately $7.0 billion annually, based on average 2012 ICIS isobutanol pricing.

Gasoline Blendstocks

Isobutanol has direct applications as a gasoline blendstock. Fuel-grade isobutanol may be used as a high energy content, low Reid Vapor Pressure ("RVP"), gasoline blendstock and oxygenate. Based on isobutanol's low water solubility, in contrast with ethanol, we believe that isobutanol will be compatible with existing refinery infrastructure, allowing for blending at the refinery rather than blending at the terminal.

Further, based on isobutanol's high energy content and low water solubility, as well as testing completed by the National Marine Manufacturers Association ("NMMA"), the Outdoor Power Equipment Institute ("OPEI") and Briggs & Stratton ("BASCO"), we believe that isobutanol has direct applications as a blendstock in high value specialty fuels markets serving marine, off-road vehicles, small engine and sports vehicle markets.

We estimate the total addressable worldwide market for isobutanol as a gasoline blendstock to be approximately 40 BGPY, or approximately $100 billion annually.

Butene and Hydrocarbon Markets

Beyond direct use as a specialty chemical and gasoline blendstock, isobutanol can be dehydrated to produce butenes which can then be converted into other products such as para-xylene, jet fuel and many other hydrocarbon fuels and specialty blendstocks, offering substantial potential for additional demand. The conversion of isobutanol into butenes is a fundamentally important process that enables isobutanol to be used as a building block chemical in multiple markets.

Jet Fuel

We have demonstrated the conversion of our isobutanol into a renewable jet fuel blendstock that meets current ASTM International ("ASTM") and U.S. military synthetic jet fuel blendstock performance and purity requirements. We have successfully delivered to the U.S. Air Force, the U.S. Army and the U.S. Navy a combined total of approximately 42,000 gallons of jet fuel made from isobutanol. We are working to obtain an ASTM standard specification for the use of such jet fuel blendstock in commercial aviation. We have already presented positive test results from fit-for-purpose testing of our biojet fuel to ASTM's 'alcohol-to-jet' ("ATJ") task force. The full ASTM specification for our ATJ fuel is expected to be issued in 2015.

Military and commercial airlines are currently looking to form strategic alliances with biofuels companies to meet their renewable fuel needs.

We estimate the global market for jet fuel to be approximately 80 BGPY, or approximately $210 billion annually.

Para-xylene ("PX") and Polyethylene Terephthalate ("PET")

Isobutanol can be used to produce PX, polyester and their derivatives, which are used in the beverage, food packaging, textile and fibers markets. PX is a key raw material in PET production.

We estimate the global market for PET to be approximately 50 million metric tons per year, or approximately $100 billion annually, of which approximately 30% will be used for plastic bottles and containers. We have demonstrated the conversion of our isobutanol into renewable PX at the demonstration plant in Silsbee, TX. This demonstration

plant has been operational since September 2013 producing renewable PX.

Butenes

Traditionally butenes have been produced as co-products from the process of cracking naptha in the production of ethylene. Historically, lower natural gas prices and reported reductions in the use of naptha as the feedstock for the production of ethylene have resulted in a projected reduction in the volume of available butenes. This structural shift in feedstocks increases the potential market opportunity for our isobutanol in the production of butenes.
Chemical-grade isobutanol can be sold to isobutylene and n-butene (butenes) chemicals users for conversion into lubricants, methyl methacrylate and rubber applications.
We estimate the total addressable worldwide market for butenes to be approximately 2.1 BGPY, or approximately $6.7 billion annually.
Other Hydrocarbon Fuels

Diesel fuel, gasoline, isooctane, isooctene and bunker fuel may also be produced from our isobutanol. We have demonstrated the conversion of isobutanol to isooctane and renewable gasoline. We have also converted isobutanol to kerosene with properties that we expect may be fit for diesel blending applications.
Our Retrofit Strategy

We plan to commercialize our isobutanol through a strategy of Retrofitting existing ethanol production facilities to produce isobutanol and related renewable products and have developed our technology platform to be compatible with the existing approximately 23 BGPY of global operating ethanol production capacity. We believe that our design will enable us to switch between the production of isobutanol and ethanol, or produce both products simultaneously, which will allow us to optimize asset utilization and cash flows at a facility by taking advantage of fluctuations in market conditions.

The Retrofit approach allows us to project lower capital outlays and a faster commercial deployment schedule than the construction of new plants. We believe the ability of GIFT® to convert sugars from multiple renewable feedstocks into isobutanol will enable us to leverage the abundant domestic sources of historically low cost grain feedstocks (e.g., corn) currently used for ethanol production and will potentially enable the expansion of our production capacity into international markets that use sugar cane or other feedstocks that are prevalent outside of the U.S.

We are developing our Retrofit equipment package through our exclusive alliance with ICM, Inc. (“ICM”), a leading engineering firm that has designed approximately 50% of current North American operating ethanol production capacity, which the RFA estimates to be over 13.5 BGPY. We plan to secure access to existing ethanol production facilities through joint ventures, licensing arrangements, tolling partnerships and direct acquisitions. We will then work with ICM to deploy GIFT® through Retrofit of these production facilities.

In September 2010, we acquired a 22 million gallon per year (“MGPY”) ethanol production facility in Luverne, Minnesota (the “Agri-Energy Facility”). The Agri-Energy Facility is a traditional dry-mill facility, which means that it uses dry-milled corn as a feedstock. In partnership with ICM, we developed a detailed Retrofit design for this facility and began the Retrofit in 2011. In May 2012, we commenced initial startup operations for the production of isobutanol at the Agri-Energy Facility. In September 2012, as a result of a lower than planned production rate of isobutanol we made the strategic decision to pause isobutanol production at the Agri-Energy Facility at the conclusion of startup operations to focus on optimizing specific parts of the process to further enhance isobutanol production rates. In 2013, we modified our Agri-Energy Facility which we believe will allow us to increase the production rate. In June 2013, we resumed the limited production of isobutanol operating one fermenter and one GIFT® separation system in order to (i) verify that the modifications had significantly reduced the previously identified infections, (ii) demonstrate that our biocatalyst performs in the one million liter fermenters at the Agri-Energy Facility, and (iii) confirm GIFT® efficacy at commercial scale at the Agri-Energy Facility. In August 2013, we expanded production capacity at the Agri-Energy Facility by adding a second fermenter and second GIFT® system to further verify our

results with a second configuration of equipment. For these initial production runs, we demonstrated fermentation operations at commercial scale combined with the use of our GIFT® separation system using a dextrose (sugar) feedstock. Based on the results of these initial production runs, in October 2013 we began commissioning the Agri-Energy Facility on corn mash to test isobutanol production run rates and to optimize biocatalyst production, fermentation separation and water management systems. In March 2014, we decided to leverage the flexibility of our GIFT® technology and modify the Agri-Energy Facility which we believe will enable the simultaneous production of isobutanol and ethanol. In line with our strategy to maximize asset utilization and site cash flows, this configuration of the plant should allow us to continue to optimize our isobutanol technology at a commercial scale, while taking advantage of the strong ethanol margins currently available in the marketplace.

Through December 31, 2013, we have incurred capital costs of approximately $65.7 million on the Retrofit of the Agri-Energy Facility. The Retrofit of the Agri-Energy Facility includes a number of additional capital costs that are unique to the design of the

facility, including additional equipment that we believe will allow us to switch between ethanol and isobutanol production, modifications to increase the potential production capacity of GIFT® at this facility and the establishment of an enhanced yeast seed train to accelerate the adoption of improved yeast strains at this facility and at future plants. Capital expenditures at the Agri-Energy Facility also include upfront design and engineering costs, plant modifications identified as necessary during initial startup operations for the production of isobutanol and capitalized interest.

Until May 2012, when we commenced startup operations for the production of isobutanol at the Agri-Energy Facility, we derived revenue from the sale of ethanol, distiller's grains and other related products produced as part of the ethanol production process at the Agri-Energy Facility. Continued ethanol production during the Retrofit process allowed us to retain local staff for the future operation of the plant, maintain the equipment and generate cash flow. Our Retrofit strategy includes the ability to switch between the production of isobutanol and ethanol, or produce both products simultaneously, with an emphasis on maximizing cash flows at a site. We believe that we will be able to transition back to the production and sale of ethanol and related products at the Agri-Energy Facility, in whole or in part, if we were to project positive cash flows from ethanol operations versus maintaining the facility at idle or producing isobutanol, including any costs related to the transition, but there is no guarantee that this will be the case. As a result, the historical operating results of our subsidiary, Agri-Energy, LLC ("Agri-Energy"), and the operating results reported during the Retrofit to isobutanol production may not be indicative of future operating results for Agri-Energy or Gevo's consolidated results. The future return on our invested capital depends on our ability to maximize cash flows from the Retrofit of the Agri-Energy Facility. Through the date this Report was filed, we have not transitioned back to ethanol production.

In June 2011, we entered into an isobutanol joint venture agreement (the "Joint Venture Agreement") with Redfield Energy, LLC, a South Dakota limited liability company ("Redfield"), under which we have agreed to work with Redfield to Retrofit Redfield's approximately 50 MGPY ethanol production facility located near Redfield, South Dakota (the "Redfield Facility") for the commercial production of isobutanol. We will be responsible for all costs associated with the Retrofit of the Redfield Facility. We will be entitled to a percentage of Redfield's profits, losses and distributions after commercial production of isobutanol has begun. As of December 31, 2013, we have incurred $0.4 million in planning-related costs, such as project engineering and permitting costs, for the future Retrofit of the Redfield Facility. Based on our preliminary engineering estimates, we will need to raise additional debt or equity capital to Retrofit the Redfield Facility, but are not obligated to do so.

We are currently in discussions with several other ethanol plant owners that have expressed an interest in entering into joint ventures, licensing arrangements, tolling arrangements or selling their facilities to us for Retrofit. Collectively, these ethanol plant owners represent over 1.7 BGPY of ethanol capacity. However, there can be no assurance that we will be able to acquire access to ethanol plants from these owners. We have also entered into a non-binding collaborative agreement with the Malaysian government's East Coast Economic Region Development Council, Malaysian Biotechnology Corporation and the State Government of Terengganu with the intent to develop a cellulosic biomass isobutanol facility in Southeast Asia.

We have also commenced a licensing strategy whereby a licensee would invest the capital for the Retrofit of its own ethanol plant. In return, Gevo, as the licensor, would expect to receive an up-front license fee and ongoing royalty payments from the project. In October 2013, Gevo signed a letter of intent with IGPC Ethanol Inc. to Retrofit their approximately 40 MGPY ethanol plant. In March 2014, Gevo signed a letter of intent with Porta Hnos S.A. to become the exclusive licensee of Gevo's GIFT technology in Argentina.

Customer Agreements

We anticipate commencing a limited commercial scale campaign for the production of isobutanol in 2014 at our Agri-Energy Facility to demonstrate commercial scale capacity and sell resulting product. We expect initial commercial production to be directed to serve the high-purity and chemical-grade markets, to provide introductory volumes to the specialty fuel blendstock markets in the U.S. and to be further processed at a demonstration plant near Houston, Texas, to fulfill contracts for various hydrocarbons applications such as ATJ and PX. Upon commencing commercial isobutanol production, we intend to produce and sell isobutanol distiller's grains ("iDGs™") as an animal feed co-product in the same manner as distiller's grains are sold in the ethanol industry today.

As of December 31, 2013, we have entered into the following agreements:

Off-take Agreements

Sasol Chemical Industries. In July 2011, we entered into an international off-take and distribution agreement with Sasol Chemical Industries, acting through its Sasol Solvents Division ("Sasol") to distribute isobutanol globally. The agreement has an initial term of three years and appoints Sasol as a worldwide distributor of our high-purity, chemical-grade biobased isobutanol for sale as a solvent or chemical intermediate. Sasol has been granted non-exclusive distribution rights in North and South America and exclusive distribution rights in the rest of the world. Upon our first commercial sale of isobutanol under the terms of the agreement, if Sasol desires to maintain its exclusive distribution rights, it is obligated to either purchase certain minimum quantities of isobutanol or pay us applicable shortfall fees. We are also obligated to either supply Sasol with certain minimum quantities of isobutanol or pay Sasol applicable shortfall fees. The agreement includes a pricing mechanism that accounts for changes in corn feedstock costs, within certain market-based limits.

Mansfield Oil Company. In August 2011, we entered into a commercial off-take agreement with Mansfield Oil Company ("Mansfield") to distribute isobutanol-based fuel into the petroleum market. Mansfield markets and distributes fuel to thousands of commercial customers across the U.S. and has over 900 supply points across the U.S. The agreement allows Mansfield to blend our isobutanol for its own use and to be a distributor of our isobutanol for a term of five years. We also entered into a three-year supply services agreement with C&N, a Mansfield subsidiary ("C&N"), which will provide supply chain services including logistics management, customer service support, invoicing and billing services. Substantially all ethanol sold by Agri-Energy since its acquisition in September 2010 was sold to C&N pursuant to a separate ethanol purchase and marketing agreement.

Land O'Lakes Purina Feed LLC. In December 2011, we entered into a commercial off-take and marketing agreement with Land O'Lakes Purina Feed LLC ("Land O'Lakes Purina Feed") for the sale of iDGs™ produced by the Agri-Energy Facility. Land O' Lakes Purina Feed provides farmers and ranchers with an extensive line of agricultural supplies (feed, seed, and crop protection products) and services. Pursuant to the agreement, Land O'Lakes Purina Feed will be the exclusive marketer of our iDGs™ and modified wet distiller's grains for the animal feed market. The agreement has an initial three-year term following the first commercial sales of iDGs™ with automatic one-year renewals thereafter unless terminated by one of the parties. Further, we plan to work with Land O'Lakes Purina Feed to explore opportunities to upgrade the iDGs™ for special value-added applications in feed markets.

Supply and Commercialization Agreements

U.S. Military. In September 2011, we were awarded a contract by the Defense Logistics Agency (the "DLA"), to supply ATJ to the U.S. Air Force. The DLA sources and provides nearly 100% of the consumable items the U.S. military needs to operate. Under the contract, we provided the U.S. Air Force with 11,000 gallons of ATJ which was used to support engine testing and a demonstration flight in an A-10 aircraft. The term of the agreement was through December 30, 2012. The demonstration flight was successfully completed in June 2012. The ATJ was produced from isobutanol at a hydrocarbon processing demonstration plant near Houston, Texas, in partnership with South Hampton Resources, Inc. ("South Hampton"). In September 2012, we were awarded an additional contract for the procurement of up to 45,000 gallons of ATJ. In March 2013, the Company entered into a contract with the DLA to supply the U.S. Army with 3,650 gallons of biojet fuel and in May 2013 this initial order was increased by 12,500 gallons. In September 2013, the Company entered into a contract with the DLA to supply the U.S. Navy with 20,000 gallons of biojet fuel. In December 2013, the Company entered into a contract with the DLA to supply the U.S. Navy with an additional 10,000 gallons of biojet fuel.

Toray Industries. In June 2011, we announced that we had successfully produced fully renewable and recyclable PET in cooperation with Toray Industries, Inc. ("Toray Industries"). Working directly with Toray Industries, we employed prototypes of commercial operations from the petrochemical and refining industries to make PX from isobutanol. Toray Industries used our bio-para-xylene ("bio-PX") and commercially available renewable mono ethylene glycol to produce fully renewable PET films and fibers. In June 2012, we entered into a definitive agreement with Toray

Industries, as amended in October 2013, for the joint development of an integrated supply chain for the production of bio-PET. Pursuant to the terms of the agreement with Toray Industries, we received $1.0 million which we used for the design and construction of a demonstration plant. We anticipate producing bio-PX at the demonstration plant which will be sold to Toray Industries. Toray Industries is obligated to purchase initial volumes of bio-PX. In the event we are unable to produce and deliver a minimum quantity of bio-PX to Toray Industries by April 30, 2014, we will be required to refund the $1.0 million by May 31, 2014. We anticipate shipment of bio-PX from our plant in April 2014.

LANXESS. In May 2010, we entered into a non-binding heads of agreement outlining the terms of a future supply agreement with LANXESS Inc. ("LANXESS"), an affiliate of LANXESS Corporation, a stockholder in our Company. LANXESS is a specialty chemical company with global operations that currently produces butyl rubber from petrochemical-based isobutylene. Isobutylene is a type of butene that can be produced from isobutanol through straightforward, well-known chemical processes. Pursuant to the heads of agreement, LANXESS has proposed to purchase at least 20 MGPY of our isobutanol for an initial term of 10 years, with an option to extend the term for an additional five years. The pricing under our heads of agreement with LANXESS includes a mechanism that adjusts for future changes in the cost of our feedstock. In January 2011, we also entered into an exclusive supply agreement, as amended, with LANXESS pursuant to which LANXESS has granted us an exclusive first right to supply LANXESS and its affiliates with certain of their requirements of biobased isobutanol during the initial ten-year term. These agreements demonstrate the demand for isobutanol from the Agri-Energy Facility. However, certain of the commitments that we have received are non-binding and there can be no assurance that we will be able to negotiate final terms with these or other companies in a timely manner, or at all, or attract customers based on our arrangements with the petrochemical companies and large brand owners discussed above.

Competitive Strengths

Our competitive strengths include:

Renewable platform molecule to serve multiple large drop-in markets. We believe that our isobutanol will readily substitute for petroleum-based isobutanol and a portion of the petroleum-based n-butanol in use in the specialty chemicals market which exists today. We believe isobutanol can be readily blended with gasoline in existing infrastructure to serve the need for biofuels blending demanded by the U.S. Environmental Protection Agency (the "EPA") for fuel manufacturers. We also believe that the butenes produced from our isobutanol will have potential applications in substantially all of the global hydrocarbon fuels market and will serve as renewable alternatives in the production of polyester, rubber, plastics, fibers and other polymers, which comprise approximately 40% of the global petrochemicals market.

Proprietary, low cost technology with global applications. We believe that GIFT® is capable of producing isobutanol cost-effectively from renewable carbohydrate sources, which we expect will enable the economic production of hydrocarbon derivatives of isobutanol. Our biocatalysts have demonstrated a product yield on sugar of approximately 94% of theoretical maximum by weight, which is close to the maximum actual yield attainable from fermentable sugars. Collectively, we believe that these attributes, coupled with our ability to leverage the existing ethanol production infrastructure, will create relatively low capital cost routes to renewable isobutanol production which will enable our isobutanol to be economically competitive with many of the petroleum-derived products used in the chemicals and fuels markets today. Additionally, GIFT® is designed to enable the economic production of isobutanol and other alcohols from multiple renewable feedstocks, which will allow our technology to be deployed worldwide.

Capital-light commercial deployment strategy optimized for existing infrastructure. GIFT® allows us to leverage the existing approximately 23 BGPY of global operating ethanol production capacity and our Retrofit strategy supports a relatively low capital cost route to isobutanol production. Using a factored estimate based on the detailed design of the Agri-Energy Facility in combination with our learning from the Retrofit of that facility, we estimate base Retrofit costs to convert an existing grain ethanol plant's production capacity to isobutanol production capacity will be approximately $1.00 per gallon of existing annual ethanol capacity. This projection translates to approximately $50 million for a 50 MGPY ethanol facility and approximately $100 million for a 100 MGPY ethanol facility. These projected Retrofit capital expenditures are less than estimates for new plant construction for the production of advanced biofuels, including cellulosic ethanol.

Technology design enables optimized asset utilization. We believe that our GIFT® design will enable us to switch between the production of isobutanol and ethanol, or produce both products simultaneously, which will allow us to optimize asset utilization and cash flows at a facility by taking advantage of fluctuations in market conditions. Following the completion of a Retrofit, we expect the original plant to operate in

essentially the same manner as it did prior to the Retrofit, producing primary products (isobutanol and/or ethanol) and co-products (iDGs™ and/or distiller's grains).

GIFT® demonstrated at commercially relevant scale. We previously completed the Retrofit of a one MGPY ethanol facility in St. Joseph, Missouri with our proprietary engineering package designed in partnership with ICM and we successfully produced isobutanol at this facility. We have also demonstrated fermentation operations at commercial scale combined with the use of our GIFT® separation system using a dextrose (sugar) feedstock at our Agri-Energy Facility.

Off-take agreements and strategic relationships with chemicals, fuels, animal feed and engineering industry leaders in place. We have entered into off-take agreements and strategic relationships with global industry leaders to accelerate the execution of our commercial deployment strategy both in the U.S. and internationally. To facilitate the adoption of our technology at existing ethanol plants, we have entered into an exclusive alliance with ICM. We expect our relationships with entities such as Sasol, Mansfield, Toray Industries, the U.S. Air Force, the U.S. Army, the U.S. Navy and LANXESS, among others, to contribute to the development of new chemical and fuel market applications of our isobutanol. To enable the future integration of cellulosic feedstocks into our isobutanol production process, we have obtained an exclusive license from Cargill, Incorporated ("Cargill"), to integrate its proprietary biocatalysts into our GIFT® system. To accelerate the adoption of isobutanol as a platform molecule and to support the development of hydrocarbon products derived from our isobutanol, we have developed a hydrocarbon demonstration plant near Houston, Texas with South Hampton.

Experienced team with a proven track record. Our management team offers an exceptional combination of scientific, operational and managerial expertise and our CEO, Dr. Patrick Gruber, has spent over 20 years developing and successfully commercializing industrial biotechnology products. Across the Company, our employees have 400 combined years of biotechnology, synthetic biology and biobased product experience. Our employees have been inventors on over 300 patents and patent applications over the course of their careers. Our team members have played key roles in the commercialization of several successful, large-scale industrial biotechnology projects, including a sugar substitute sweetener, four organic acid technologies, an animal feed additive, monomers for plastics and biobased plastics and the first biologically derived high-purity monomer for the production of plastic at a world-scale production facility. As a result of their extensive experience, members of our management team play important roles in the industrial biotechnology industry at U.S. and international levels.

Our Production Technology Platform

We have used tools from synthetic biology, biotechnology and process engineering to develop a proprietary fermentation and separation process to cost effectively produce isobutanol from renewable feedstocks. GIFT® is designed to allow for relatively low capital expenditure Retrofits of existing ethanol facilities, enabling a rapid route to isobutanol production from the fermentation of renewable feedstocks, while maintaining the flexibility to revert to the production of ethanol or the simultaneous production of isobutanol and ethanol. GIFT® isobutanol production is very similar to existing ethanol production, except that we replace the ethanol producing biocatalyst with our isobutanol producing biocatalyst and we incorporate well-known equipment into the production process to separate and collect the isobutanol during the fermentation process. We believe that reusing large parts of the ethanol plant without modification is beneficial because the unchanged parts will stay in place and continue to operate after the Retrofit as they did when ethanol was produced. This means that the existing operating staff can continue to manage the production of isobutanol because they will already have experience with the base equipment. We believe this continuity will reduce the risks associated with the production startup following the Retrofit as most of the process is unchanged and the existing operating staff is available to monitor and manage the production process. In addition, we believe that our GIFT® design will enable us to switch between the production of isobutanol and ethanol, or produce both products simultaneously, which will allow us to optimize asset utilization and cash flows at a facility by taking advantage of fluctuations in market conditions.

We intend to process the spent grain mash from our fermenters to produce iDGs™, relying on established processes in the current ethanol industry. We plan to market our iDGs™ to the dairy, beef, swine and poultry industries as a high-protein, high-energy animal feed. To support these efforts, in December 2011 we entered into an exclusive off-take and marketing agreement with Land O'Lakes Purina Feed for the sale of iDGs™ produced at the Agri-Energy Facility. We believe that our sales of our iDGs™ will allow us and our partners to offset a significant portion of our grain feedstock costs, in the same manner as is practiced by the corn-based ethanol industry today through sale of dry distiller's grains.

Biocatalyst Overview

Our biocatalysts are microorganisms that have been designed to metabolize sugars to produce isobutanol. Our technology team develops these proprietary biocatalysts to efficiently convert fermentable sugars of all types by engineering isobutanol pathways into the biocatalysts, and then minimizing the production of unwanted by-products to improve isobutanol yield and purity, thereby reducing operating costs. With our biocatalysts, we have demonstrated that we can produce isobutanol at key commercial parameters, which we believe validates our biotechnology pathways and efficiencies. Our planned commercial biocatalyst is designed to produce isobutanol from any fuel ethanol feedstock currently in commercial use, including grains (e.g., corn, wheat, sorghum and barley) and sugar cane. This feedstock flexibility supports our initial deployment in the U.S., as we seek to Retrofit available ethanol production facilities which are primarily focused on corn feedstocks, and will enable our future expansion into international markets for production of isobutanol using sugar cane or other grain feedstocks.

Although development work still needs to be done, we have shown at laboratory scale that we can convert cellulosic sugars into isobutanol. In addition, through an exclusive license and a services arrangement with Cargill, we are developing a cellulosic sugar converting biocatalyst specifically designed to efficiently produce isobutanol from the sugars derived from cellulosic feedstocks, including crops that are specifically cultivated to be converted into fuels (e.g., switchgrass), forest residues (e.g., waste wood, pulp and sustainable wood), agricultural residues (e.g., corn stalks, leaves, straw and grasses) and municipal green waste (e.g., grass clippings and yard waste). We carefully select our biocatalyst platforms for their tolerance to isobutanol and other conditions present during an industrial fermentation process, as well as their known utility in large-scale commercial production processes. As a result, we expect our biocatalysts to equal or exceed the performance of the yeast used in prevailing grain ethanol production processes.

Biocatalyst Development

Initially, we used a pathway developed at the University of California, Los Angeles ("UCLA") and exclusively licensed from The Regents of the University of California ("The Regents"), to create a research biocatalyst capable of producing biobased isobutanol. We chose to use E. coli as the bacteria for our research biocatalyst because of its ease of use and greater understanding relative to other biocatalysts, and because it was the microorganism used by UCLA in developing the licensed pathway. We then developed a new yeast biocatalyst to allow for anaerobic, or oxygen free, isobutanol production as well as minimizing the production of unwanted by-products to improve isobutanol yield and purity, thereby reducing operating costs. These efforts resulted in a substantial fermentation yield increase and enabled compatibility with existing ethanol infrastructure.

By fermenting sugars to isobutanol while reducing the production of unwanted by-products, our proprietary isobutanol pathway channels the available energy content of fermentable sugars to isobutanol. Due to thermodynamic constraints that govern the conservation of energy, other processes may match our yield, but will be unable to exceed it significantly. We have achieved approximately 94% of the theoretical yield, which is near to, if not the maximum practical yield limit attainable from the fermentation of sugars. Our expected theoretical yield is equivalent to that of industrial ethanol production.

We designed our biocatalysts to equal or exceed the performance of the yeast currently used in commercial ethanol production not only in yield, or percentage of the theoretical maximum percentage of isobutanol that can be made from a given amount of feedstock, but also fermentation time, or how fast the sugar fed to the fermentation is converted to isobutanol. At least matching this level of performance is important to our initial commercial production because doing so allows GIFT® fermentation to be performed in most existing grain ethanol fermenters without increasing vessel sizes. Because an isobutanol molecule contains more carbon and hydrogen than an ethanol molecule, and because liquid isobutanol has a different density than liquid ethanol, the isobutanol volume our fermentation process produces will be approximately 80% of the volume of ethanol produced by ethanol fermentation at an equivalent fermentation theoretical yield on sugar. In other words, ICM's design studies predict that a Retrofitted 100 MGPY ethanol plant can produce approximately 80 MGPY of isobutanol. A volume of 80 million gallons of isobutanol has roughly the same energy content as 100 million gallons of ethanol. Over time, we anticipate being able to the increase the productivity of our yeast biocatalyst, thereby allowing for the production of a greater volume of isobutanol over the same fermentation time which would allow for an increase in expected annual isobutanol production. Based on this expectation, we increased the size of the proprietary isobutanol separation system that was installed at the Agri-Energy Facility to accommodate potential increased isobutanol production.

We initially achieved our target fermentation performance goals with our research biocatalyst at our GIFT® mini-plant and then replicated this performance in a Retrofit one MGPY ethanol demonstration facility located at ICM's St. Joseph, Missouri site. Yeast is generally the preferred host for industrial fermentation because it is industrially proven for biofuels production, capable of out-competing bacteria, and is less susceptible to bacteriophage, a common

problem for bacterial fermentations. We select biocatalysts for their projected performance in the GIFT® process, targeting lower cost isobutanol production. We continue to seek to improve the performance parameters of our biocatalyst with a goal of reducing projected operating costs, increasing operating reliability and increasing the volume of isobutanol production.

Feedstock Flexibility

We have designed our biocatalyst platform to be capable of producing isobutanol from any fuel ethanol feedstock currently in commercial use, which we believe, in conjunction with our proprietary isobutanol separation unit, will permit us to Retrofit any existing fuel ethanol facility. We have demonstrated that our biocatalysts are capable of converting the types of sugars in grains and sugar cane to isobutanol at our commercial targets for fermentation time and yield and we believe that they will have the ability to convert these sugars into isobutanol at a commercial scale. The vast majority of fuel ethanol currently produced in the U.S. is produced from corn feedstock, which is abundant according to data from the U.S. Department of Agriculture and the RFA. Although development work still needs to be done, we have shown at laboratory scale that we can convert cellulosic sugars into isobutanol. Through an exclusive license with Cargill, we are developing a future-generation yeast biocatalyst that is specifically designed to produce isobutanol from mixed sugars derived from cellulosic sources including purpose grown energy crops, agricultural residues, forest residues and municipal green waste.

We expect that our feedstock flexibility will allow our technology to be deployed worldwide and will enable us to offer our customers protection from the raw material cost volatility historically associated with petroleum-based products.

GIFT® Improves Fermentation Performance

Our experiments show that the GIFT® fermentation and recovery system provides enhanced fermentation performance as well as efficient recovery of isobutanol and other alcohols. The GIFT® system enables continuous separation of isobutanol from the fermentation tanks while fermentation is in process. Isobutanol is removed from the fermentation broth using a low temperature distillation to continuously remove the isobutanol as it is formed without the biocatalyst being affected. Since biocatalysts have a low tolerance for high isobutanol concentrations in fermentation, the ability of our process to continuously remove isobutanol as it is produced allows our biocatalyst to continue processing sugar into isobutanol at a high rate without being suppressed by rising levels of isobutanol in the fermenter, reducing the time to complete the fermentation. Using our biocatalysts, we have demonstrated that GIFT® enables isobutanol fermentation times equal to, or less than, those achieved in the current conventional production of ethanol, which allows us to fit our technology into existing ethanol fermenters reducing capital expenditures. We have designed a proprietary engineering package in partnership with ICM to carry out our isobutanol fermentation and recovery process.

GIFT® requires limited change to existing ethanol production infrastructure. As with ethanol production, feedstock is ground, cooked, treated with enzymes and fermented. Just like ethanol production, after fermentation, a primary product (isobutanol) and a co-product (iDGs™) are recovered for sale. The main modifications of the GIFT® system are replacing the ethanol producing yeast with Gevo's proprietary isobutanol producing biocatalyst, and adding low temperature distillation equipment for continuous removal and separation of isobutanol.

Conversion of Isobutanol into Hydrocarbons

We have demonstrated conversion of our isobutanol into a wide variety of hydrocarbon products which are currently used to produce plastics, fibers, polyester, rubber and other polymers and hydrocarbon fuels. Hydrocarbon products consist entirely of hydrogen and carbon and are currently derived almost exclusively from petroleum. Importantly, isobutanol can be dehydrated to produce butenes, which are an intermediate product in the production of hydrocarbon products with many industrial uses. The straightforward conversion of our isobutanol into butenes is a fundamentally important process that enables isobutanol to be used as a building block chemical. Much of the technology necessary to convert isobutanol into butenes and subsequently into these hydrocarbon products is known and practiced in the chemicals industry today, as shown in an SRI research study. For example, the dehydration of ethanol to ethylene, which uses a similar process and technology to the dehydration of isobutanol, is practiced commercially today to serve the ethylene market. The dehydration of isobutanol into butenes is not commercially practiced today because isobutanol produced from petroleum is not cost-competitive with other petrochemical processes for generation of butenes. We believe that our efficient fermentation technology for producing isobutanol will promote commercial isobutanol dehydration and provide us with the opportunity to access hydrocarbon markets. To assist in accessing these markets, we have developed a hydrocarbon demonstration plant at our partner South Hamptons' site near Houston, Texas. The demonstration plant can process up to 10,000 gallons of our isobutanol per month into a variety of renewable hydrocarbons for use as fuels and chemicals.

Our Strategy

Our strategy is to commercialize our isobutanol for use directly as a specialty chemical and fuel blendstock and for conversion into plastics, fibers, polyester, rubber, and other polymers and hydrocarbon fuels. Key elements of our strategy include:

Deploy first commercial production facility. In September 2010, we acquired a 22 MGPY ethanol production facility in Luverne, Minnesota, the Agri-Energy Facility. Following completion of the initial work to Retrofit of the Agri-Energy Facility, in May 2012, we commenced initial startup operations for the production of isobutanol at the Agri-Energy Facility. In September 2012, as a result of a lower than planned production rate of isobutanol we made the strategic decision to pause isobutanol production at the Agri-Energy Facility at the conclusion of startup operations to focus on optimizing specific parts of the process to further enhance isobutanol production rates. We have since modified our Agri-Energy Facility which we believe will allow us to increase the production rate and in October 2013 we commissioned the Agri-Energy Facility on corn mash to test isobutanol production run rates and to optimize biocatalyst production, fermentation separation and water management systems. In March 2014, we decided to leverage the flexibility of our GIFT® technology and modify the Agri-Energy Facility which we believe will enable the simultaneous production of isobutanol and ethanol. In line with our strategy to maximize asset utilization and site cash flows, this configuration of the plant should allow us to continue to optimize our isobutanol technology at a commercial scale, while taking advantage of the strong ethanol margins currently available in the marketplace.

Build on existing agreements with customers to support capacity growth. We have entered into off-take or supply agreements with Sasol, Mansfield, Land O'Lakes Purina Feed, Toray Industries, LANXESS and the DLA on behalf of the U.S. Air Force, U.S. Army and U.S. Navy. We intend to add to our customer pipeline by entering into isobutanol supply agreements for further capacity with additional customers in the refining, specialty chemicals and transportation sectors both in the U.S. and internationally.

Expand our production capacity via Retrofit of additional existing ethanol facilities. As we secure supply agreements with additional customers, we plan to expand access to production capacity through increasing production capacity at our current locations and acquiring or gaining access to additional and larger scale ethanol facilities via joint ventures, licensing arrangements, tolling arrangements and acquisitions. We believe that our exclusive alliance with ICM will enhance our ability to rapidly deploy our technology on a commercial scale.

Expand adoption of our isobutanol across multiple applications and markets. We intend to drive adoption of our isobutanol in multiple U.S. and international chemicals and fuels end-markets by offering a renewable product with superior properties at a competitive price. In addition, we intend to leverage existing and potential strategic partnerships with hydrocarbon companies to accelerate the use of isobutanol as a building block for drop-in hydrocarbons. This strategy will be implemented through direct supply agreements with leading chemicals and fuels companies, as well as through alliances with key technology providers.

Align the value chain for our isobutanol by collaborating with large brand owners and customers. We are developing commitments from large brand owners to purchase products made from our isobutanol by third-party chemicals and fuels companies. For example, we have entered into a definitive agreement with Toray Industries for the joint development of an integrated supply chain for the production of bio-PET. We have also successfully completed the scope of work for the joint research, development, license and commercialization agreement with Coca-Cola to create bio-PX from plant based isobutanol, which is intended to accelerate the development of Coca-Cola's second-generation PlantBottle™ packaging made from 100% plant-based materials and we have extended the agreement through 2014. Further discussion with production partners is envisioned to scale up the bio-PX technology. We have also been awarded contracts to supply ATJ to the U.S. Air Force, U.S. Army and U.S. Navy. We intend to use these commitments, as well as other future agreements, to obtain contracts to sell our isobutanol directly into the manufacturing chain that will use our isobutanol as a building block in the production of PX, PET, biojet fuel and other hydrocarbon products.

Incorporate additional feedstocks into our isobutanol production facilities. Our biocatalysts can produce isobutanol from any fuel ethanol feedstock currently in commercial use, including grains (e.g., corn, wheat, sorghum and barley) and sugar cane. We believe the ability of our biocatalysts to produce isobutanol from multiple feedstocks will support our future efforts to expand production of isobutanol in the U.S., as well as into international markets that use sugar cane or other grain feedstocks, either directly or through partnerships. We are also developing a future-generation biocatalyst under contract with Cargill, which we believe will enable us to efficiently integrate mixed sugars from cellulosic feedstocks into our production facilities when the technology to separate and break down cellulosic biomass into separate simple sugar molecules becomes commercially available.

Industry Overview

Petroleum is a fundamental source of chemicals and fuels, with annual global demand in 2011 estimated at $3.2 trillion based on data from the IEA. Globally organic chemicals and fuels targeted by us are primarily derived from petroleum, as it has historically been convenient and inexpensive. However, recent fundamental trends, including increasing petroleum demand (especially from emerging markets), limited new supply, price volatility and the changing regulatory framework in the U.S. and internationally with regard to the environmental impact of fossil fuels has increased the need for economical, renewable and environmentally sensitive alternatives to petroleum at stable prices.

These market developments, combined with advances in synthetic biology and metabolic pathway engineering, have encouraged the convergence between the industrial biotechnology and energy sectors. These new technologies enable the production of flexible platform chemicals, such as isobutanol, from renewable sources instead of fossil fuels, at

economically competitive costs. Based on our compilation of data from SRI, Nexant, CMAI, the EIA and the IEA, we believe that isobutanol and the products derived from it have potential applications in approximately 40% of the global petrochemicals market and substantially all of the global fuels market, and that our isobutanol fulfills an immediate need for alternatives to petroleum. Previous attempts to create renewable, cost-effective alternatives to petroleum-based products have faced several challenges:

First generation renewable products are not considered drop-in solutions for existing petroleum infrastructure. Many products contemplated by earlier manufacturers are not considered effective alternatives to conventional petroleum due to various limitations, including lower energy content, viscosity and corrosive properties which limit pipeline transportation or require expensive engine modifications.

Capital intensity. Due to the high capital cost incurred in establishing new biofuels plants, numerous companies face limited expansion and customization opportunities and have not been able to relocate to areas with access to new or more cost-effective feedstocks.

Reliance on regulatory environment. Many conventional alternatives to current nonrenewable chemicals and fuels have relied heavily on government subsidies. In the absence of governmental support, these alternatives face significant operational hurdles and are often no longer economically viable.

Abundant supply of petroleum-based products. Traditionally butenes have been produced as co-products from the process of cracking naptha in the production of ethylene. Reported reductions in the use of naptha as the feedstock for the production of ethylene have changed the projected menu of co-products, resulting in a projected reduction in the volume of available butenes. This structural shift in feedstocks increases the potential market opportunity for our isobutanol in the production of butenes.

Advantages of Our Isobutanol

We believe our isobutanol provides advantages over both petroleum-based products and alternative renewable chemicals and fuels. These advantages are based on the chemical properties of isobutanol and our low cost production technology.

Lower cost to produce than petroleum isobutanol. We believe our biobased route to produce isobutanol will be lower cost than the predominant route to produce petroleum-based isobutanol. This will allow us to offer our biobased isobutanol to the existing isobutanol markets at a price we believe will encourage customers to switch from petroleum-based butanol to our biobased isobutanol. Further, we believe our lower cost production will enable the development of new uses for isobutanol as a building block for a variety of intermediate chemicals and hydrocarbon products and as a gasoline blendstock.

Alternative source of four-carbon hydrocarbons. Butenes, hydrocarbon products with many industrial uses, can be produced through the dehydration of isobutanol. We believe that butenes derived from our isobutanol can be further processed into other high-value hydrocarbon products using currently known chemistries, as shown in research reports by SRI and CMAI. These include ethyl tert-butyl ether, propylene and MMA, for use in plastics, industrial coatings and other chemical additives, such as antioxidants and plastics modifiers. The prevailing process to manufacture butenes for use by the petrochemical industry today is through the process of cracking naptha in the production of ethylene. Ethylene crackers produce butenes as a co-product and the butenes market has tightened as these crackers have shut down and have shifted or committed to shift from oil to natural gas feedstocks, reducing the available supply of butenes. As a result, we expect the hydrocarbons derived from our isobutanol to provide chemical and fuel producers with both supply chain diversity and alternatives to current petroleum-derived products, which can be particularly important in a tight petrochemicals environment.

Feedstock flexibility. We believe our biocatalysts will produce isobutanol cost-effectively at a commercial scale from any feedstock currently used to produce grain ethanol. Additionally, these biocatalysts provide the ability to convert sugar cane into isobutanol, which provides us with opportunities to expand our production into areas with sugar cane ethanol facilities. Moreover, our work with Cargill to develop a future-generation biocatalyst enabling cellulosic isobutanol production will position us to integrate non-food-based feedstocks into our production facilities when the technology to separate and break down cellulosic biomass into separate simple sugar molecules becomes commercially available. We believe that having the flexibility to use different crops and agricultural by-products as a feedstock for isobutanol production is a particularly attractive trait to the chemicals and fuels markets and has the potential to mitigate their exposure to petroleum price volatility.

Optimized for existing infrastructure. Isobutanol is a fungible, drop-in fuel with chemical and performance characteristics as a fuel additive that are well known. For example, due to its low water solubility, we believe isobutanol can be transported in pipelines and blended into gasoline formulations at the refinery in contrast to prevailing practices where ethanol is blended at the terminal and cannot be transported via pipelines. Initial test results from DNV Columbus, Inc., a materials testing company, showed that isobutanol did not contribute to stress corrosion cracking in pipeline materials under conditions where ethanol typically would. We believe that refiners are interested

in the possibility of using isobutanol to replace more expensive alkylates in their gasoline formulations. In addition, we believe that an important and distinct advantage of isobutanol is its potential ability to align the interests of refiners, commodity agriculture and the ethanol industry, accelerating the development of a biobased economy.

Highly effective solution to current regulatory limitations. The EPA currently limits gasoline blends for use in normal automobile engines to a maximum of 15% ethanol for model years 2001 and later, and 10% for all other model years. Isobutanol can expand biofuel market opportunities as a fuel blendstock as we expect it to be blended into gasoline at higher levels without modifying engines or gasoline distribution logistics. In November 2010, our isobutanol was approved by the EPA for 12.5% blending with gasoline. Additionally, we have filed a dossier for advanced isobutanol

with the EPA. Even if made from corn in Retrofitted ethanol plants, isobutanol can qualify as an advanced biofuel if it can provide a 50% lifecycle greenhouse gas ("GHG") reduction compared to 2005 baseline gasoline. Lifecycle GHG emissions are the aggregate quantity of GHGs related to the full fuel cycle, including all stages of fuel and feedstock production and distribution, from feedstock generation and extraction through distribution, delivery and use of the finished fuel. Furthermore, because isobutanol contains approximately 30% more energy than ethanol, each gallon of isobutanol provides a renewable identification number ("RIN") value of 1.3. Therefore, a refiner could purchase fewer gallons of isobutanol than ethanol while meeting its biofuels obligation under the Renewable Fuels Standard ("RFS2").

Lower impact on air quality. Isobutanol has a low RVP. RVP measures a fuel's volatility, and in warm weather, high RVP fuel can contribute to precursors of smog formation. The EPA sets regional and seasonal clean air standards in the U.S., which include RVP limitations, with the potential for stricter air quality regulations in the near future. Given isobutanol's lower RVP relative to ethanol, we believe refiners using isobutanol blends will have more flexibility in their gasoline formulations to meet clean air standards. This added flexibility can be valuable in regions of the U.S. that fail to meet EPA-designated national air quality standards, or in markets like California where the RVP maximum is very low.

Value added specialty applications. Due to isobutanol's high energy content and low water solubility, as well as testing completed by the NMMA, OPEI and BASCO, we believe that isobutanol may have direct applications in high value specialty fuels settings serving marine, small equipment engines and sports vehicle markets.

Competition

Our isobutanol is targeted for use in the following markets: direct use as a solvent and gasoline blendstock, use in the chemicals industry for producing rubber, plastics, fibers, polyester and other polymers and use in the production of hydrocarbon fuels. We face competitors in each market, some of which are limited to individual markets, and some of which will compete with us across all of our target markets.

Renewable isobutanol. We are a leader in the development of renewable isobutanol via fermentation of renewable plant biomass. While the competitive landscape in renewable isobutanol production is limited at this time, we are aware of other companies that are seeking to develop isobutanol production capabilities. These include Butamax Advanced Biofuels LLC ("Butamax"), a joint venture between BP p.l.c. ("BP") and E. I. du Pont de Nemours and Company ("DuPont"), and Butalco GmbH, a development stage company based in Switzerland. While each of these entities is a private company, based on our due diligence related to intellectual property filings we believe that we have a favorable competitive position in the development of renewable isobutanol production.

Solvent markets. We also face competition from companies that are focused on the development of n-butanol, a related compound to isobutanol. These companies include Cathay Industrial Biotech Ltd., METabolic EXplorer S.A., Eastman Chemicals Company, Cobalt Technologies, Inc. and Green Biologics Ltd. We understand that these companies produce n-butanol from an acetone-butanol-ethanol ("ABE") fermentation process primarily for the small chemicals markets. ABE fermentation using a Clostridia biocatalyst has been used in industrial settings since 1919. As discussed in several academic papers analyzing the ABE process, such fermentation is handicapped in competitiveness by high energy costs due to low concentrations of butanol produced and significant volumes of water processed. It requires high capital and operating costs to support industrial scale production due to the low rates of the Clostridia fermentation, and results in a lower butanol yield because it produces ethanol and acetone as by-products. We believe our proprietary process has many significant advantages over the ABE process because of its limited requirements for new capital expenditures, its production output of only isobutanol as a primary product and its limited water usage in production. We believe these advantages will produce a lower cost isobutanol compared to n-butanol produced by ABE fermentation. N-butanol's lower octane rating compared to isobutanol gives it a lower value in the gasoline blendstock market, but n-butanol can compete directly in many solvent markets where n-butanol and isobutanol have similar performance characteristics.

Gasoline blendstocks. In the gasoline blendstock market isobutanol competes with non-renewable alkylate and renewable ethanol. We estimate the total potential global market for isobutanol as a gasoline blendstock to be approximately 40 BGPY. Alkylate is a premium value gasoline blendstock typically derived from petroleum. However, petroleum feeds for alkylate manufacture are pressured by continued increases in the use of natural gas to generate olefins for the production of alkylate, due to the low relative cost of natural gas compared to petroleum. Isobutanol has fuel properties similar to alkylate and, as such, we expect that isobutanol could be used as a substitute for some alkylate in fuel applications. Ethanol is renewable and has a high octane rating, and although it has a high RVP, ethanol receives a one pound RVP waiver in a large portion of the U.S. gasoline market. Renewability is important in the U.S. because the RFS2 mandates that a minimum volume of renewable blendstocks be used in gasoline each year. A high octane rating is important for engine performance and is a valuable characteristic because many inexpensive gasoline blendstocks have lower octane ratings. Low RVP is important because the EPA sets maximum permissible RVP levels for gasoline. In markets where low RVP is important, isobutanol can enable refiners to meet fuel specifications at lower cost. Ethanol’s vapor pressure waiver is valuable because it offsets much of the negative value of ethanol’s high RVP. We believe that our isobutanol will be valued for its combination of low RVP, relatively high octane and renewability.

Many production and technology supply companies are working to develop ethanol production from cellulosic feedstocks, including Shell Oil Company, BP, DuPont-Danisco Cellulosic Ethanol LLC, Abengoa Bioenergy, S.A., POET, LLC, ICM, Mascoma Corporation, Inbicon A/S, INEOS New Planet BioEnergy LLC, Coskata, Inc., Archer Daniels Midland Company, BlueFire Ethanol, Inc., KL Energy Corporation, ZeaChem Inc., Iogen Corporation, Qteros, Inc., AE Biofuels, Inc. and many smaller startup companies. Successful commercialization by some or all of these companies will increase the supply of renewable gasoline blendstocks worldwide, potentially reducing the market size or margins available to isobutanol.

Plastics, fibers, polyester, rubber and other polymers. Isobutanol can be dehydrated to produce butenes, hydrocarbon intermediates currently used in the production of plastics, fibers, polyester, rubber and other polymers. The straightforward conversion of our isobutanol into butenes is a fundamentally important process that enables isobutanol to be used as a building block chemical in multiple markets. These markets include butyl rubber, lubricants and additives derived from butenes such as isobutylene, poly methyl methacrylate from isobutanol, propylene for polypropylene from isobutylene, polyesters made via PX from isobutylene and polystyrene made via styrene.

In these markets, we compete with the renewable isobutanol companies and renewable n-butanol producers described previously, and face similar competitive challenges. Our competitive position versus petroleum-derived plastics, fibers, rubber and other polymers varies, but we believe that the high volatility of petroleum prices, often tight supply markets for petroleum-based petrochemical feedstocks and the desire of many consumers for goods made from more renewable sources will enable us to compete effectively. However, petrochemical companies may develop alternative pathways to produce petrochemical-based hydrocarbon products that may be less expensive than our isobutanol or more readily available or developed in conjunction with major petrochemical, refiner or end user companies. These products may have economic or other advantages over the plastics, fibers, polyester, rubber and other polymers developed from our isobutanol. Further, some of these companies have access to significantly more resources than we do to develop products.

Additionally, Global Bioenergies, S.A. is pursuing the direct production of isobutylene from renewable carbohydrates. Through analysis of the fermentation pathway, we believe that the direct production of butenes such as isobutylene via fermentation will have higher capital and operating costs than production of butenes derived from our isobutanol.

Hydrocarbon fuels. Beyond direct use as a fuel additive, isobutanol can be converted into many hydrocarbon fuels and specialty blendstocks, offering substantial potential for additional demand in the fuels markets. We will compete with the incumbent petroleum-based fuels industry, as well as biofuels companies. The incumbent petroleum-based fuels industry makes the vast majority of the world’s gasoline, jet and diesel fuels and blendstocks. The petroleum-based fuels industry is mature, and includes a substantial base of infrastructure for the production and distribution of petroleum-derived products. However, the industry faces challenges from its dependence on petroleum. High and volatile oil prices will provide an opportunity for renewable producers relying on biobased feedstocks like corn, which in recent years have had lower price volatility than oil.

Biofuels companies will provide substantial competition in the gasoline market. These biofuels competitors are numerous and include both large established companies and numerous startups. Government tax incentives for renewable fuel producers and regulations such as the RFS2 help provide opportunities for renewable fuels producers to compete. In particular, in the gasoline and gasoline blendstock markets, Virent Energy Systems, Inc. (“Virent”) offers a competitive process for making gasoline and gasoline blendstocks. However, we have the advantage of being able to target conversion of isobutanol into specific high-value molecules such as isooctane, which can be used to make gasoline blendstocks with a higher value than whole gasoline, which we do not believe Virent’s process can match. In the jet fuel market, we may face competition from companies such as Synthetic Genomics, Inc., Solazyme, Inc., Sapphire Energy, Inc. and Exxon-Mobil Corporation, which are pursuing production of jet fuel from algae-based technology. Renewable Energy Group, Inc. and others are also targeting production of jet fuels from renewable

biomass. We may also face competition from companies working to produce jet fuel from hydrotreated vegetable oils. In the diesel fuels market, competitors such as Amyris Biotechnologies, Inc. (“Amyris”) provide alternative hydrocarbon diesel fuel. We believe our technology provides a higher yield on feedstock than the isoprenoid fermentation pathway developed by Amyris, which we believe will yield a production cost advantage.

Ethanol. We compete with numerous ethanol producers located throughout the United States, many of which have much greater resources than we do, including Archer-Daniels-Midland Company, POET, LLC and Valero Energy Corporation. Competition for corn supply from other ethanol plants and other corn consumers will likely exist in all areas and regions in which our current and future plants will operate. We also face competition from foreign producers of ethanol and such competition may increase significantly in the future. Large international companies have developed, or are developing, increased foreign ethanol production capacities. Brazil is the world’s second largest ethanol producing country. Brazil’s ethanol production is sugarcane-based, as opposed to corn-based, and has historically been less expensive to produce.

Intellectual Property

Our success depends in large part on our proprietary products and technology for which we seek protection under patent, copyright, trademark and trade secret laws. Such protection is also maintained in part using confidential disclosure agreements. Protection of our technologies is important so that we may offer our customers and partners proprietary services and products unavailable from our competitors, and so that we may exclude our competitors from practicing technology that we have developed or exclusively licensed. If competitors in our industry have access to the same technology, our competitive position may be adversely affected. As of December 31, 2013, we exclusively licensed rights to 94 issued patents and filed patent applications in the U.S. and in various foreign jurisdictions. Of the licensed patents and patent applications, most are owned by Cargill and exclusively licensed to us for use in certain fields. These licensed patents and patent applications cover both enabling technologies and products or methods of producing products. Our licenses to such patents allow us to freely practice the licensed inventions, subject only to the terms of these licenses. As of December 31, 2013, we have submitted 393 patent applications in the U.S. and in various foreign jurisdictions. These patent applications are directed to our technologies and specific methods and products that support our business in the biofuel and bioindustrial markets. We continue to file new patent applications, for which terms extend up to 20 years from the filing date in the U.S.

As of December 31, 2013, we have been issued 21 U.S. patents and 6 international patents.

We will continue to file and prosecute patent applications and maintain trade secrets, as is consistent with our business plan, in an ongoing effort to protect our intellectual property. It is possible that our licensors' current patents, or patents which we may later acquire or license, may be successfully challenged or invalidated in whole or in part. It is also possible that we may not obtain issued patents from our filed applications, and may not be able to obtain patents regarding other inventions we seek to protect. Under appropriate circumstances, we may sometimes permit certain intellectual property to lapse or go abandoned. Due to uncertainties inherent in prosecuting patent applications, sometimes patent applications are rejected and we may subsequently abandon them. It is also possible that we will develop products or technologies that will not be patentable or that the patents of others will limit or preclude our ability to do business. In addition, any patent issued to us may provide us with little or no competitive advantage, in which case we may abandon such patent or license it to another entity.

We have obtained registered trademarks for Gevo Integrated Fermentation Technology®, GIFT®, and Gevo® in the U.S., and we have a pending U.S. trademark application for iDGs™. These registered and pending U.S. trademarks are also registered or pending in certain foreign countries.

Our means of protecting our proprietary rights may not be adequate and our competitors may independently develop technology or products that are similar to or compete with ours. Patent, trademark and trade secret laws afford only limited protection for our technology platform and products. The laws of many countries do not protect our proprietary rights to as great an extent as do the laws of the U.S. Despite our efforts to protect our proprietary rights, unauthorized parties have in the past attempted, and may in the future attempt, to operate using aspects of our intellectual property or products or to obtain and use information that we regard as proprietary. Third parties may also design around our proprietary rights, which may render our protected technology and products less valuable. In addition, if any of our products or technologies is covered by third-party patents or other intellectual property rights, we could be subject to various legal actions. We cannot assure you that our technology platform and products do not infringe patents held by others or that they will not in the future.

Litigation may be necessary to enforce our intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement, invalidity, misappropriation or other allegations. Any such litigation could result in substantial costs and diversion of our resources. In particular, over time, the costs of defending the lawsuit filed by Butamax, a joint venture between

DuPont and BP, alleging that we have infringed upon patents relating to the production of isobutanol, may become significant (as described further in Part I, Item 3 of this Report). Moreover, any settlement of or adverse judgment resulting from such litigation could require us to obtain a license to continue to make, use or sell the products or technology that is the subject of the claim, or otherwise restrict or prohibit our use of the technology.

Partnerships and Collaborations

ICM, Inc.

We currently have an exclusive alliance with ICM to Retrofit ethanol plants to the production of isobutanol. ICM is a company that focuses on engineering, building and supporting biorefineries for the renewable fuel industry. We believe that our alliance with ICM will provide us with a competitive advantage and allow us to more quickly achieve commercial-scale production of isobutanol. Through our alliance with ICM, we plan to Retrofit existing ethanol plants to expand our production. ICM is well-positioned for this project because they have designed approximately 50% of the current North American operating ethanol production capacity.

Development Agreement. On October 16, 2008, we entered into a development agreement with ICM, which set forth the terms for the development of a one MGPY corn drying ethanol demonstration facility in St. Joseph, Missouri. Working with ICM engineers, we installed GIFT® at the St. Joseph demonstration plant, and successfully produced isobutanol. The development agreement, as amended, may be terminated by either party upon 30 days' written notice.

Commercialization Agreement. We entered into a commercialization agreement with ICM on October 16, 2008, which was amended and restated on August 11, 2011. Under this agreement, as amended and restated, ICM serves as our exclusive engineering contractor for the Retrofit of ethanol plants in North America, and we serve as ICM's exclusive technology partner for the production of butanols, pentanols and propanols from the fermentation of sugars. This commercialization agreement outlines the terms and fees under which ICM will provide engineering and construction services for commercial plants utilizing dry-milled feedstocks of corn or grain sorghum. Pursuant to the commercialization agreement, we will work with ICM on the joint development of commercial plants utilizing our GIFT® system, including the development of engineering designs to Retrofit existing dry-mill ethanol facilities. Due to the fact that some of ICM's proprietary process technology will be included in the plant designs, both parties intend that ICM will be the exclusive engineering services provider for commercial plants. However, in the event that ICM fails to meet commercially reasonable timelines for the engineering of the commercial plants, after a 30-day cure period, we may terminate our exclusivity obligations to ICM. The term of the commercialization agreement is through October 16, 2018. Either party may terminate the commercialization agreement upon 30 days' notice in the event that the other party ceases regular operations, enters or is forced into bankruptcy or receivership, liquidates its assets or breaches the agreement.

In August 2011, we also entered into a work agreement with ICM. Pursuant to the terms of the work agreement, ICM will provide engineering, procurement and construction ("EPC") services for the Retrofit of ethanol plants. Under this work agreement, ICM provided us EPC services for the Retrofit of the Agri-Energy Facility. We expect our alliance with ICM to help us continue to develop efficiency and cost improvements in Retrofitting plants and producing isobutanol.

Cargill, Incorporated

We have obtained exclusive rights to develop and integrate Cargill's microorganisms into GIFT®. These microorganisms are able to process cellulosic biomass, which we hope will eventually allow low cost production of isobutanol from varied inputs, including purpose grown energy crops (e.g., switchgrass), forest residues (e.g., waste wood, pulp and sustainable wood), agricultural residues (e.g., corn stalks, leaves, straw and grasses) and municipal green waste (e.g., grass clippings and yard waste).

License Agreement. In February 2009, we entered into a license agreement with Cargill. Under the license agreement, Cargill granted us an exclusive, worldwide, royalty-bearing license to certain Cargill patents and biological materials, including specialized microorganisms and tools for modifying those microorganisms to produce specific molecules. We also have an option, with a first right of refusal, to purchase an exclusive license to use such patents and biological materials owned by Cargill to produce additional molecules.

In exchange for the rights granted under the license agreement, we paid Cargill an upfront license fee and have committed to make additional payments to Cargill including, (i) payments based on the achievement of certain milestones, (ii) payments upon the commercialization of product lines which use the Cargill biological materials or are otherwise covered by the patent rights, and (iii) royalty payments. We may terminate the license agreement at any time upon 90 days' written notice and either party may terminate the license agreement for a material breach by the other party that is not cured within 120 days of notification of such breach. Unless terminated earlier, the agreement remains in effect until no licensed patent rights remain under the license agreement.

The Coca-Cola Company

We have established a working relationship with The Coca-Cola Company ("Coca-Cola to create bio-PX from our isobutanol in an effort to accelerate the development of Coca-Cola's second generation PlantBottle™ packaging made from 100% plant-based materials.

Joint Research, Development, License and Commercialization Agreement. In November 2011 (as amended in March 2014), we entered into a joint research, development, license and commercialization agreement with Coca-Cola. Pursuant to this agreement, we have agreed to conduct research and development activities, including engineering to produce bio-PX from isobutanol, with the ultimate goal of producing bio-PET for food-grade bottling. Our work is targeted to take the technology from laboratory-scale to commercial-scale and support Coca- Cola's efforts to lead the beverage industry away from fossil-fuel based packaging by offering an alternative made completely from renewable raw materials. Pursuant to the terms of the agreement, Coca-Cola paid us a fixed fee for the research program during the first two years of the agreement. The research and development activities under this agreement have been successfully completed and the agreement has been extended through 2014. Collaboration and discussion with production partners is envisioned to scale-up the bio-PX technology.

Toray Industries, Inc.

In June 2011, we announced that we had successfully produced fully renewable and recyclable PET in cooperation with Toray Industries. Working directly with Toray Industries, we employed prototypes of commercial operations from the petrochemical and refining industries to make PX from isobutanol. Toray Industries used our bio-PX and commercially available renewable mono ethylene glycol to produce fully renewable PET films and fibers.

Joint Development Agreement. In June 2012, we entered into a definitive agreement with Toray Industries, as amended in October 2013, for the joint development of an integrated supply chain for the production of bio-PET. Pursuant to the terms of the agreement with Toray Industries, we received $1.0 million which we used for the design and construction of a demonstration plant. We anticipate producing bio-PX at the demonstration plant which will be sold to Toray Industries. Toray Industries is obligated to purchase initial volumes of bio-PX. In the event we are unable to produce and deliver a minimum quantity of bio-PX to Toray Industries by April 30, 2014, we will be required to refund the $1.0 million by May 31, 2014.

Other Material Agreements

Redfield Energy, LLC

Joint Venture Agreement. In June 2011, we entered into the "Joint Venture Agreement" with Redfield and executed the second amended and restated operating agreement of Redfield (together, the "Joint Venture Documents"). Under the terms of the Joint Venture Documents, we have agreed to work with Redfield toward the Retrofit of the Redfield Facility, an approximately 50 MGPY ethanol production facility located near Redfield, South Dakota, for the commercial production of isobutanol. Under the terms of the Joint Venture Agreement, Redfield has issued 100 Class G membership units in Redfield (the "Class G Units") to our wholly-owned subsidiary, Gevo Development, LLC ("Gevo Development"). Gevo Development is the sole holder of Class G units, which entitle Gevo Development to certain information and governance rights with respect to Redfield, including the right to appoint two members of Redfield's 11-member board of managers. The Class G units currently carry no interest in the allocation of profits, losses or other distributions of Redfield and no voting rights. Such rights will vest upon the commencement of commercial isobutanol production at the Redfield Facility, at which time we anticipate consolidating Redfield's operations because we anticipate we will control the activities that are most significant to the entity.

We will be responsible for all costs associated with the Retrofit of the Redfield Facility. Redfield will remain responsible for certain expenses incurred by the facility including certain repair and maintenance expenses and any costs necessary to ensure that the facility is in compliance with applicable environmental laws. We anticipate that the Redfield Facility will continue its current ethanol production activities during much of the Retrofit. Following installation of the Retrofit assets, ethanol production operations will be suspended to enable testing of the isobutanol production capabilities of the facility (the "Performance Testing Phase"). During the Performance Testing Phase, we will be entitled to receive all revenue generated by the Redfield Facility and will make payments to Redfield to cover the costs incurred by Redfield to operate the facility plus the profits, if any, that Redfield would have received if the facility had been producing ethanol during that period (the "Facility Payments"). We have also agreed to maintain an escrow fund during the Performance Testing Phase as security for our obligation to make the Facility Payments.

If certain conditions are met, commercial production of isobutanol at the Redfield Facility will begin upon the earlier of the date upon which certain production targets have been met or the date upon which the parties mutually agree that commercial isobutanol production at the Redfield Facility will be commercially viable at the then-current production rate. At that time, (i) we will have the right to appoint a total of four members of Redfield's 11-member board of managers, and (ii) the voting and economic interests of the Class G units will vest and Gevo Development, as the sole holder of the Class G Units, will be entitled to a percentage of Redfield's profits, losses and distributions, to be

calculated based upon the demonstrated isobutanol production capabilities of the Redfield Facility.

Gevo Development, or one of its affiliates, will be the exclusive marketer of all products produced by the Redfield Facility once commercial production of isobutanol at the Redfield Facility has begun. Additionally, we will license the technology necessary to produce isobutanol at the Redfield Facility to Redfield, subject to the continuation of the marketing arrangement described above. In the event that the isobutanol production technology fails or Redfield is permanently prohibited from using such technology, we will forfeit the Class G Units and lose the value of our investment in Redfield.

Gevo, Inc. entered into a guaranty effective as of June 2011, pursuant to which it has unconditionally and irrevocably guaranteed the payment by Gevo Development of any and all amounts owed by Gevo Development pursuant to the terms and conditions of the Joint Venture Agreement and certain other agreements that Gevo Development and Redfield expect to enter into in connection with the Retrofit of the Redfield Facility.

As of December 31, 2013, we have incurred $0.4 million in planning-related costs, such as project engineering and permitting costs, for the future Retrofit of the Redfield Facility. Based on estimates from our preliminary engineering process, we will need to raise additional debt or equity capital in order to complete the Retrofit of the Redfield Facility.

TriplePoint Financing

Gevo Loan Agreement. In August 2010, Gevo, Inc. entered into a loan and security agreement (the "Gevo Loan Agreement") with TriplePoint Capital LLC ("TriplePoint"), pursuant to which we borrowed $5.0 million. In July 2012, we used $5.4 million of the proceeds from the July 2012 offering of the 7.5% convertible senior notes due 2022 (the "Convertible Notes") to pay in full all amounts outstanding under the Gevo Loan Agreement, including an end-of-term payment equal to 8% of the amount borrowed.

Original Agri-Energy Loan Agreement. In August 2010, Gevo Development borrowed $12.5 million from TriplePoint to finance its acquisition of Agri-Energy. In September 2010, upon completion of the acquisition, the loan and security agreement (the "Original Agri-Energy Loan Agreement") was amended to make Agri-Energy the borrower under the facility. In December 2013, we used $5.1 million of the proceeds from the offering of common stock units that was completed in December 2013 to pay off the remaining $5.1 million in outstanding principal under this loan. Pursuant to the amendments described below, we have also agreed to pay the end-of-term payment of $1.0 million associated with this loan in 12 equal monthly payments commencing January 2014 and ending December 2014.

Amended Agri-Energy Loan Agreement. In October 2011, the Original Agri-Energy Loan Agreement was amended and restated (the "Amended Agri-Energy Loan Agreement") to provide Agri-Energy with additional term loan facilities of up to $15.0 million to pay a portion of the costs, expenses, and other amounts associated with the Retrofit of the Agri-Energy Facility to produce isobutanol. The Amended Agri-Energy Loan Agreement includes customary affirmative and negative covenants for agreements of this type and events of default. In October 2011, Agri-Energy borrowed $10.0 million under the additional term loan facilities which matures on October 2015. In January 2012, Agri-Energy borrowed an additional $5.0 million under the additional term loan facilities which matures December 2015, bringing the total borrowed under the additional term loan facilities to $15.0 million. The aggregate amount outstanding under the additional term loan facilities bears interest at a rate equal to 11% and is subject to an end-of-term payment equal to 5.75% of the amount borrowed. At December 31, 2013, we were in compliance with the debt covenants under the Amended Agri-Energy Loan Agreement. As security for its obligations under the Amended Agri-Energy Loan Agreement, Agri-Energy granted TriplePoint a security interest in and lien upon all of its assets. Gevo, Inc. also guaranteed Agri-Energy's obligations under the Amended Agri-Energy Loan Agreement. As additional security, concurrently with the execution of the Amended Agri-Energy Loan Agreement, (i) Gevo Development entered into a limited recourse continuing guaranty in favor of TriplePoint, (ii) Gevo Development entered into an amended and restated limited recourse membership interest pledge agreement in favor of TriplePoint, pursuant to which it pledged the membership interests of Agri-Energy as collateral to secure the obligations under its guaranty and (iii) Gevo, Inc. entered into an amendment to its security agreement with TriplePoint (the "Gevo Security Agreement"), which secured its guarantee of Agri-Energy's obligations under the Amended Agri-Energy Loan Agreement.

June 2012 Amendments. In June 2012, Gevo, Inc. entered into (i) an amendment (the "Security Agreement Amendment") to the Gevo Security Agreement and (ii) an amendment (the "Gevo Loan Amendment") to the Gevo Loan Agreement. In addition, concurrently with the execution of the Security Agreement Amendment and the Gevo Loan Amendment, Agri-Energy entered into an amendment to the Amended Agri-Energy Loan Agreement. These amendments, among other things: (i) permitted the issuance of our 7.5% convertible senior notes due 2022 (the "Convertible Notes"); (ii) removed Agri-Energy's and the Company's options to elect additional interest-only periods

upon the achievement of certain milestones; (iii) permitted Agri-Energy to make dividend payments and distributions to the Company for certain defined purposes related to the Convertible Notes; (iv) added as an event of default the payment, repurchase or redemption of the Convertible Notes or of amounts payable in connection therewith other than certain permitted payments related to the Convertible Notes; (v) added a negative covenant whereby the Company could not incur any indebtedness other than as permitted under the Security Agreement Amendment; and (vi) added a prohibition on making any Coupon Make-Whole Payments (as defined in the Indenture governing the Convertible Notes (the "Indenture")) in cash prior to the payment in full of all remaining outstanding obligations under the Amended Agri-Energy Loan Agreement.

December 2013 Amendments. In December 2013, Gevo, Inc. entered into additional amendments to certain of its existing agreements with TriplePoint and entered into a new intellectual property assignment agreement in favor of TriplePoint to, among other things:

permit the issuance of Warrants associated with our December 2013 offering of common stock units;
grant TriplePoint a lien and security interest in all of the intellectual property of the Company;
expand the events of default to add as an event of default the repurchase of the Warrants;
waive any prepayment premium (but not any end-of-term payment) with respect to the Original Agri-Energy Loan Agreement and the Amended Agri-Energy Loan Agreement;

re-price the three outstanding warrants to purchase common stock of the Company that are held by TriplePoint, which as of December 31, 2013 are exercisable in the aggregate for 388,411 shares of the Company's common stock, to reflect an exercise price equal to $1.18 per share;
waive the requirement for Agri-Energy to make principal amortization payments on the Amended Agri-Energy Loan Agreement through December 31, 2014 (the "Restructure Period");
raise the interest rates under the Amended Agri-Energy Loan Agreement to 13% during the Restructure Period (provided that such rate will return to 11% following the Restructure Period so long as no event of default under the Amended Agri-Energy Loan Agreement shall be continuing on the last day of the Restructure Period);
during the period beginning January 2015, and continuing through and including the final monthly installment due under the Amended Agri-Energy Loan Agreement, adjust the monthly payment due and payable to 50% of the fully amortizing amount of principal and interest otherwise due and payable for such month, applied first to outstanding accrued interest and then to principal, with the remaining 50% portion of such required payments of principal and interest for such month accruing and made due and payable at the time of the final monthly installment; and
permit dividends and distributions to make cash payments in lieu of issuing fractional shares in connection with any issuance of stock resulting from the exercise of any warrant.

Research and Development

Our strategy depends on continued improvement of our technologies for the production of isobutanol, as well as next generation chemicals and biofuels based on our isobutanol technology. Accordingly, we annually devote significant funds to research and development. The following table shows our research and development costs by function (in thousands).

	Year Ended December 31,		
	2013	2012	2011
Biocatalyst development	$10,177	$11,526	$9,722
Process engineering and operation of pilot and demo plants	8,239	5,318	8,462
Chemistry and applications development	1,763	2,587	1,569
Total Research and Development Expense	$20,179	$19,431	$19,753

During 2013, 2012 and 2011, we recorded revenue from government grants and cooperative agreements in the amounts of $2.7 million, $2.8 million and $0.8 million, respectively, which primarily related to research and development activities performed in our biocatalyst, chemistry, and applications development groups.

Our research and development activities are currently being performed primarily in our corporate headquarters located in Englewood, Colorado and the demonstration plant at the South Hampton facility.

Environmental Compliance Costs

Regulation by governmental authorities in the U.S. and other countries is a significant factor in the development, manufacture and marketing of second-generation biofuels. Our isobutanol and the next generation products isobutanol will be used to produce may require regulatory approval by governmental agencies prior to commercialization. In particular, biofuels are subject to rigorous testing and premarket approval requirements by the EPA's Office of Transportation and Air Quality, and regulatory authorities in other countries. In the U.S., various federal, and, in some cases, state statutes and regulations also govern or impact the manufacturing, safety, storage and use of biofuels. The process of seeking required approvals and the continuing need for compliance with applicable statutes and regulations requires the expenditure of substantial resources. Regulatory approval, if and when obtained for any of these next

generation products, may be limited in scope, which may significantly limit the uses for which our isobutanol and these next generation products may be marketed.

When built at a dry-mill facility, our GIFT® fermentation process creates iDGs™, a potential animal feed component, as a co-product. We have undertaken a self-assessed Generally Regarded As Safe (GRAS) process via third party scientific review to support the sale of our iDGs™ as animal feed. While we believe we can rely on this review, as we update our biocatalysts to increase isobutanol production, for further customer assurance, we also intend to pursue approval from the Center for Veterinary Medicine of the U.S. Food and Drug Administration (the “FDA”). Further, the FDA’s policies may change and additional government regulations may be enacted that could prevent, delay or require regulatory approval of our co-products. We cannot predict the likelihood, nature or extent of adverse governmental regulations that might arise from future legislative or administrative action, either in the U.S. or abroad.

Our process contains a genetically engineered organism which, when used in an industrial process, is considered a new chemical under the EPA's Toxic Substances Control Act program ("TSCA"). These laws and regulations require us to obtain and comply with the EPA's Microbial Commercial Activity Notice process to operate our isobutanol assets. We do not anticipate a material adverse effect on our business or financial condition as a result of our efforts to comply with these requirements. However, the TSCA new chemical submission policies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of our products. We cannot predict the likelihood, nature or extent of adverse governmental regulations that might arise from future legislative or administrative action, either in the U.S. or abroad.

There are various third-party certification organizations, such as ASTM and Underwriters' Laboratories, Inc. ("UL"), involved in certifying the transportation, dispensing and use of liquid fuel in the U.S. and internationally. In 2013, a specification for fuel grade isobutanol titled ASTM D7862 "Standard Specification for Butanol for Blending with Gasoline for Use as Automotive Spark-Ignition Engine Fuel" was published. In addition, UL has published guidance on the use of isobutanol-gasoline blends in its UL87A fuel dispensers. Voluntary standards development organizations may change and additional requirements may be enacted that could prevent or delay marketing approval of our products. The process of seeking required approvals and the continuing need for compliance with applicable statutes and regulations require the expenditure of substantial resources. We do not anticipate a material adverse effect on our business or financial conditions as a result of our efforts to comply with these requirements, but we cannot predict the likelihood, nature or extent of adverse third-party requirements that might arise from future action, either in the U.S. or abroad.

We are subject to various federal, state and local environmental laws and regulations, including those relating to the discharge of materials into the air, water and ground, the generation, storage, handling, use, transportation and disposal of hazardous materials and the health and safety of our employees. These laws and regulations require us to obtain environmental permits and comply with numerous environmental restrictions as we construct and operate isobutanol assets. They may require expensive pollution control equipment or operation changes to limit actual or potential impacts to the environment. A violation of these laws, regulations or permit conditions can result in substantial fines, natural resource damage, criminal sanctions, permit revocations and facility shutdowns.

There is a risk of liability for the investigation and cleanup of environmental contamination at each of the properties that we own or operate and at off-site locations where we arrange for the disposal of hazardous substances. If these substances are or have been disposed of or released at sites that undergo investigation or remediation by regulatory agencies, we may be responsible under the Comprehensive Environmental Response, Compensation and Liability Act or other environmental laws for all or part of the costs of investigation and remediation. We may also be subject to related claims by private parties alleging property damage and personal injury due to exposure to hazardous or other materials at or from the properties. Some of these matters may require us to expend significant amounts for investigation and cleanup or other costs. We are not aware of any material environmental liabilities relating to contamination at or from our facilities or at off-site locations where we have transported or arranged for the disposal of hazardous substances.

In addition, new laws, new interpretations of existing laws, increased governmental enforcement of environmental laws or other developments could require us to make significant additional expenditures. Continued government and public emphasis on environmental issues can be expected to result in increased future investments in environmental controls at our facilities. Present and future environmental laws and regulations applicable to our operations, more vigorous enforcement policies and discovery of currently unknown conditions could all require us to make substantial expenditures. For example, our air emissions are subject to the Clean Air Act, the Clean Air Act Amendments of 1990 and similar state and local laws and associated regulations. Under the Clean Air Act, the EPA has promulgated National Emissions Standards for Hazardous Air Pollutants ("NESHAP"), which could apply to facilities that we own or operate if the emissions of hazardous air pollutants exceed certain thresholds. If a facility we operate is authorized to

emit hazardous air pollutants above the threshold level, then we might still be required to come into compliance with another NESHAP at some future time. New or expanded facilities might be required to comply with both standards upon startup if they exceed the hazardous air pollutant threshold. In addition to costs for achieving and maintaining compliance with these laws, more stringent standards may also limit our operating flexibility.

As a condition to granting the permits necessary for operating our facilities, regulators could make demands that increase our construction and operations costs, which might force us to obtain additional financing. For example, unanticipated water discharge limits could sharply increase construction costs for our projects. Permit conditions could also restrict or limit the extent of our operations. We cannot guarantee that we will be able to obtain or comply with the terms of all necessary permits to complete the Retrofit of an ethanol plant. Failure to obtain and comply with all applicable permits and licenses could halt our construction and could subject us to future claims.

Employees

As of December 31, 2013, Gevo, Inc. and its subsidiaries employed 112 employees, 82 of which were employed by Gevo, Inc. and were located in Englewood, Colorado. Of the Gevo, Inc. employees, 69 were engaged in research and development activities and

13 were engaged in general, administrative and business development activities. As of December 31, 2013, our subsidiary Agri-Energy employed 30 employees, all of which were located in Luverne, Minnesota, and involved in the operations of our production facility. None of our employees are represented by a labor union, and we consider our employee relations to be good.

Segments and Geographic Information

We have determined that we have two operating segments: (i) the Gevo, Inc. segment; and (ii) the Gevo Development/Agri-Energy segment. We organize our business segments based on the nature of the products and services offered through each of our consolidated legal entities. Transactions between segments are eliminated in consolidation. For both segments, all revenue is earned and all assets are held in the U.S. For additional financial information related to our segments, see Note 19 to our consolidated financial statements.

Gevo, Inc. Segment. Our Gevo, Inc. segment is responsible for all research and development activities related to the future production of isobutanol, including the development of our proprietary biocatalysts, the production and sale of biojet fuel, our Retrofit process and the next generation of chemicals and biofuels that will be based on our isobutanol technology. Our Gevo, Inc. segment also develops, maintains and protects our intellectual property portfolio, develops future markets for our isobutanol and provides corporate oversight services.

Gevo Development/Agri-Energy Segment. Our Gevo Development/Agri-Energy segment is currently responsible for the operation of our Agri-Energy Facility and the production of ethanol, isobutanol and related products. Substantially all of the ethanol produced from the date of the acquisition of the Agri-Energy Facility through December 31, 2012 was sold through an ethanol marketing company. Sales of ethanol and related products from our Gevo Development/Agri-Energy segment comprised approximately 85% of our consolidated revenue for the fiscal year ended December 31, 2012.

The following table sets forth our revenue by reportable segment (in thousands).

	Year Ended December 31,		
	2013	2012	2011
Revenues:			
Gevo	$4,822	$3,505	$807
Gevo Development / Agri-Energy	3,402	20,880	63,742
Consolidated	$8,224	$24,385	$64,549

Executive Officers and Directors of the Registrant

The following table sets forth certain information about our executive officers and directors.

Name	Age	Position(s)
Patrick R. Gruber, Ph.D.	53	Chief Executive Officer and Director
Christopher Ryan, Ph.D.	52	President, Chief Operating Officer and Chief Technology Officer
Mike Willis	43	Chief Financial Officer and Executive Vice President of Corporate Development and Strategy

Greg Roda	53	Chief Commercial Officer
Brett Lund, J.D., M.B.A.	38	Chief Licensing Officer, General Counsel and Secretary
Shai Weiss(1)(2)	46	Chairman of the Board of Directors
Carlos A. Cabrera(2)(3)	62	Director
Ruth I. Dreessen(3)	58	Director
Samir Kaul	40	Director
Ganesh M. Kishore, Ph.D.(1)	60	Director
Gary W. Mize(1)(3)	63	Director
Bruce A. Smith(2)	70	Director
Stacy J. Smith(1)	51	Director

(1) Member of the compensation committee.
(2) Member of the nominating and corporate governance committee.
(3) Member of the audit committee.

Patrick R. Gruber, Ph.D. has served as Chief Executive Officer and a director of the Company since 2007. Prior to joining the Company, from 2005 to 2007 Dr. Gruber was President and Chief Executive Officer of Outlast Technologies, Inc. ("Outlast Technologies"), a technology and marketing company primarily serving the textile industry, where he was responsible for all aspects of Outlast Technologies' business. Previously, Dr. Gruber co-founded NatureWorks LLC (formerly Cargill Dow, LLC) ("NatureWorks") and served as Vice President, Technology and Operations, and Chief Technology Officer from 1997 to 2005, where he was responsible for all aspects of the business' project, application and process technology development. Dr. Gruber is a member of the Bioenergy Technical Advisory Committee for the Energy Future Coalition. From 2007 to May 2012, Dr. Gruber served on the board of directors of Segetis, Inc. From 2007 to January 2012, Dr. Gruber served on the board of directors of Green Harvest Technologies, LLC and from 2007 to 2008, he served on the board of directors of Outlast Technologies. In 2011, Dr. Gruber was awarded the University of Minnesota Outstanding Achievement Award. In 2008, Dr. Gruber was awarded the first ever George Washington Carver Award, recognizing significant contributions by individuals in the field of industrial biotechnology and its application in biological engineering, environmental science, biorefining and biobased products. Dr. Gruber holds a Ph.D. in chemistry from the University of Minnesota, an M.B.A. from the University of Minnesota and a B.S. in chemistry and biology from the University of St. Thomas. We believe Dr. Gruber's qualifications to sit on our board of directors include his experience as a Chief Executive Officer and business leader and his extensive experience developing and commercializing industrial biotechnology products.

Christopher Ryan, Ph.D. has served as President and Chief Operating Officer of the Company since June 2011 and as Chief Technology Officer of the Company since September 2012, having previously served the Company as its Executive Vice President, Business Development since June 2009. Prior to joining the Company, he co-founded NatureWorks in 1997. Dr. Ryan served as Chief Operating Officer for NatureWorks from 2008 to 2009 and Chief Technology Officer for NatureWorks from 2005 to 2008, where he was involved in the development and commercialization of that company's new biobased polymer from lab-scale production in 1992 through the completion of a $300 million world-scale production facility. Prior to 1992, Dr. Ryan served for four years in Corporate R&D for specialty chemical company HB Fuller Company. He has over 20 years of experience in strategic leadership, business development and research and product development in biobased materials. Dr. Ryan holds a Ph.D. in organic chemistry from the University of Minnesota, a B.S. in chemistry from Gustavus Adolphus College and completed the Management of Technology program at the University of Minnesota.

Mike Willis has served as the Company's Executive Vice President of Corporate Development and Strategy since December 2012, as Interim Chief Financial Officer from September 2013 to April 2014, and as Chief Financial Officer since April 2014. Prior to joining the Company, Mr. Willis spent over seven years working with the Virgin Group, most recently serving as a Principal with Virgin Green Fund, a private equity firm focused on the renewable energy and resource efficiency sectors. Mr. Willis was involved in the fund's investment activities, including its investment in the Company, and worked in operational roles with some of the fund's portfolio companies, including serving as acting Chief Financial Officer of DuraTherm, Inc. Virgin Green Fund is an "affiliate" of the Company as defined in Rule 405 of the Securities Act of 1933, as amended. Previously, Mr. Willis worked with Virgin Management Limited in London in corporate development assisting several of the Virgin Group's portfolio businesses internationally with strategy and corporate finance transactions. Mr. Willis has also worked in private equity and investment banking in the United States and Canada, focusing on mid-market transactions in a variety of sectors including technology, consumer products and retail. Mr. Willis is currently on the board of directors of Wildcat Discovery Technologies. Mr. Willis holds an M.B.A. from INSEAD in France and a Bachelors of Commerce from Queen's University in Canada.

Greg Roda has served as the Company's Chief Commercial Officer since September 2013. Mr. Roda has more than 17 years of strategic leadership, business development, research and product development experience in bio-based materials. From 2007 to 2012, Mr. Roda served as Chief Executive Officer of Outlast Technologies, Inc. ("Outlast"), a

privately funded technology company that develops, licenses and markets phase change materials for use in temperature regulating fabrics, packaging and industrial materials. Prior to Outlast, Mr. Roda worked with Natureworks as a Business Development Executive overseeing commercialization of polylactic acid in the fiber and textile industry. In this role he was responsible for building a global supply chain, creating market pull-through with downstream customers, and negotiating contracts to align the interests of Natureworks and its partners. He also led a team in developing the business strategy for Natureworks. From 1996 to 2002, he worked with Cargill's Strategy and Business Development Group spending four years in Singapore with a focus on building Cargill's palm oil plantation business through acquisition and strategic partnerships. Mr. Roda holds a B.S. in mechanical engineering from the University of Michigan and an M.B.A. with a concentration in international business and finance from the University of Chicago.

Brett Lund, J.D., M.B.A. has served as General Counsel and Secretary of the Company since November 2007 and as Chief Licensing Officer since August 2013. In 2013, Mr. Lund was named "Forty Under 40" by the Denver Business Journal for being one of top forty business leaders under age 40. In 2012, Mr. Lund was named one of the "Most Influential Young Professionals" in Colorado by ColoradoBiz Magazine and also in 2012, Mr. Lund was named "Best Corporate Counsel" by the Denver Business Journal. Before joining the Company, from 2004 to 2007, he served as Chairman of the legal, intellectual property and licensing group and biotechnology licensing manager for Syngenta Biotechnology, Inc.'s ("Syngenta") biofuels business. At Syngenta, Mr. Lund led the management of intellectual property, in-licensing, out-licensing, research collaborations and strategic alliances. In 2006, Mr. Lund

was Chief Executive Officer and a member of the board of Agarigen, Inc. where he developed a novel protein expression platform for biologic pharmaceuticals, vaccines, and commercial enzymes. At Agarigen, Mr. Lund worked on a multi-million dollar research program for the Defense Advanced Research Projects Agency (DARPA) and later led the sale of Agarigen to Intrexon, Inc. (NYSE: XON). Prior to Agarigen, he served as Associate General Counsel for Ford Motor Company, Inc.'s Wingcast subsidiary. Mr. Lund was previously a corporate attorney at the law firm of Cooley LLP, where he represented numerous companies regarding intellectual property licensing, initial public offerings, venture capital financing, mergers and acquisitions, securities, strategic alliances and related transactions. Mr. Lund holds a J.D. from Duke Law School, an M.B.A. from Duke University's Fuqua School of Business and a B.A. in political science from the University of California, San Diego. He is a Certified Licensing Professional by the Licensing Executives Society and admitted to practice law in California and North Carolina.

Shai Weiss has served as a director of the Company since 2007 and was appointed chairman of our board of directors in September 2010. Mr. Weiss led the formation of Virgin Green Fund I, L.P. ("Virgin Green Fund"), where he has been a partner since 2007. Prior to forming Virgin Green Fund, he held several management positions at ntl:Telewest (now Virgin Media, Inc.), including Managing Director of Consumer Products from 2004 to 2006, Integration Director for the merger between ntl, Inc. and Telewest Global, Inc. from 2005 to 2006, Director of Operations for the ntl Group from 2003 to 2004 and Director of Financial Planning for the Consumer division from 2002 to 2003. In his work as Managing Director of Consumer Products, Mr. Weiss was responsible for the development of internet, telephone and television for the consumer division and the Virgin.net broadband internet service provider. As director of operations for the ntl Group, he was responsible for major operational and business development projects, joint ventures and development of relationships with strategic partners. Prior to joining ntl:Telewest, Mr. Weiss organized the European office of the early-stage technology venture fund Jerusalem Venture Partners, L.P. in 2000, and was an associate with Morgan Stanley's hi-tech mergers and acquisitions and corporate finance teams from 1997 to 2000. Mr. Weiss holds an M.B.A. from Columbia University and a B.B.A. from City University of New York, Baruch College in business and finance. We believe Mr. Weiss's qualifications to sit on our board of directors include his extensive experience as a business leader and venture capitalist and his experience in advising growth-focused companies with respect to strategic direction and business transactions.

Carlos A. Cabrera has served as a director of the Company since June 2010. Since December 2011, Mr. Cabrera has served as Executive Co-Chairman of Ivanhoe Energy, a publicly traded international heavy-oil development and production company. He has also served as a director of Ivanhoe Energy since May 2010. From December 2009 to November 2011, he served as President and Chief Executive Officer of the National Institute of Low Carbon and Clean Energy, or NICE, a wholly owned subsidiary of the Shenhua Group, a major Chinese coal company. At NICE, Mr. Cabrera led efforts to invent, acquire and develop technologies to reduce the environmental and climate impact of producing energy from coal. From January 2009 to July 2009, he served as Chairman of UOP LLC, a subsidiary of Honeywell International, Inc. ("UOP"). From November 2005 to January 2009, Mr. Cabrera served as UOP's President and Chief Executive Officer, where he oversaw all of UOP's operations and helped grow the company's revenue from $850 million when he assumed the role of Chief Executive Officer to $2.0 billion in 2008. From January to October 2005, Mr. Cabrera served as UOP's Senior Vice President, Process Technology and Equipment, where he led UOP's development in the refining and petrochemicals sectors. Mr. Cabrera's previous roles at UOP include Senior Vice President, Process Technology and Equipment, Senior Vice President, Refining and Petrochemicals, Vice President, Corporate Business Development and Ventures, and Vice President and General Manager, Refining. Mr. Cabrera holds an M.B.A. in business from the University of Chicago and a B.S. in chemical engineering from the University of Kentucky. We believe Mr. Cabrera's qualifications to sit on our board of directors include his broad technical and management experience in the refining, chemicals and fuels industries and his experience structuring joint ventures and leading acquisition activities in these fields.

Ruth I. Dreessen has served as a director of the Company since March 2012. Ms. Dreessen has also been a director of Targa Resources Partners LP since February 2013 and of Versar, Inc. since November 2010. Since October 2010,

Ms. Dreessen has served as Managing Director of Huntsman Lion Capital, LLC, formerly Lion Chemical Capital, LLC, a private equity firm focused on building a portfolio of companies operating primarily in the chemical and chemical-related industries. Ms. Dreessen previously served on the board of Better Minerals & Aggregates Corporation (USS Holdings, Inc.) from 1996 to 2007 and from 2005 to 2010, Ms. Dreessen served as Executive Vice President and Chief Financial Officer of TPC Group, Inc., a leading producer of value-added products derived from niche petrochemical raw materials such as C4 hydrocarbons. From 2003 to 2005, Ms. Dreessen served as Senior Vice President, Chief Financial Officer and director (2004-2005) of Westlake Chemical Corporation. Prior to joining Westlake Chemical Corporation, Ms. Dreessen served JPMorgan Chase & Co. (formerly Chase Manhattan Corporation) in several executive positions, most recently as Managing Director, Global Chemicals Group, in Houston, Texas, where she focused on leveraged and private equity transactions in chemicals and related industries. Ms. Dreessen holds an M.S. in International Affairs from Columbia University and a B.A. in European History from New College of Florida. We believe Ms. Dreessen’s qualifications to sit on our board of directors include her years of experience as an executive in the chemicals industry and her experience serving on other public company boards.

Samir Kaul has served as a director of the Company since March 2013. Mr. Kaul has been a General Partner at Khosla Ventures, a venture capital firm with a substantial focus on clean technologies, since February 2006. Previously, Mr. Kaul was a member of Flagship Ventures, a venture capital firm, from 2002 to May 2006. Prior to Flagship, Mr. Kaul worked at The Institute for

Genomic Research. Mr. Kaul currently serves on the board of directors of KiOR, Inc., as well as the boards of directors of several private companies, and he previously served on the board of directors of Amyris, Inc. from 2006 to 2012. Mr. Kaul holds a B.S. in Biology from the University of Michigan, an M.S. in Biochemistry from the University of Maryland and an M.B.A from Harvard Business School. We believe that Mr. Kaul's qualifications to sit on our board of directors include his wide-ranging experience in clean technology companies and insight in the management of startup companies and the building of companies from early stage to commercial scale.

Ganesh M. Kishore, Ph.D. has served as a director of the Company since 2008. Since 2011, Dr. Kishore has also served as a director of Evolva Holding SA and as a director of Kaiima, where he currently serves as a member of the advisory board and the compensation committee. He has also served as a director of Akermin LLC since 2010, where he serves as a member of the compensation committee, a director of Glori Energy since 2009, where he serves as a member of the compensation and risk committees and chair of the executive committee, and a director of Sentinext since 2013, where he serves as chairman of the board of directors and as a member of the compensation committee. Between 2002 and 2007, he served as a director of Embrex, Inc., serving as a member of the compensation committee and nominations committee during that time. Since April 2007, he has served as Chief Executive Officer of Malaysian Life Sciences Capital Fund, where he oversees fund management, investment portfolio management and governance of companies in which Malaysian Life Sciences Capital Fund has made investments. Since January 2009, he has also served as President and Chief Executive Officer of K Life Sciences, LLC where he provides advisory services to life science businesses. Between April 2007 and December 2008, Dr. Kishore served as a Managing Director of Burrill & Company, where his responsibilities included fund management, fund raising and governance of companies in which Burrill & Company invested. Prior to joining Burrill & Company, Dr. Kishore served as Chief Biotechnology Officer at E. I. du Pont de Nemours and Company ("DuPont") from 2005 to 2007, where he was responsible for overall biotechnology leadership for DuPont's life science businesses. Previously, he was Vice President, Technology, and Chief Technology Officer for DuPont's Agriculture and Nutrition Division from 2002 to 2005. In his time at DuPont, Dr. Kishore focused on research and development related to biotechnology. Before joining DuPont, Dr. Kishore held several positions between 1980 and 2000 at Monsanto Company ("Monsanto"), including Co-President, Nutrition and Consumer Sector, and Assistant Chief Scientist/Chief Biotechnologist. His contributions include the discovery, development and commercialization of agricultural biotechnology products such as ROUNDUP READY SOY, the development of a manufacturing process for Nutrasweet® and aiding in transforming Monsanto into a leading food and nutrition company. Dr. Kishore co-founded the plant biotechnology and informatics company Metahelix Life Sciences Pvt Ltd. in India, Mogene LC in St. Louis, Missouri and Abunda in San Francisco, California. He serves or has served on the boards of numerous nonprofit institutions, including the School of Nutrition and Policy at Tufts University, the St. Louis RCGA and the National Research Advisory Board of Washington University at St. Louis. He is also a member of the American Association for the Advancement of Science. Dr. Kishore holds a Ph.D. in biochemistry from the Indian Institute of Science, an M.S. in biochemistry from the University of Mysore and a B.S. in physics and chemistry from the University of Mysore. We believe Dr. Kishore's qualifications to sit on our board of directors include his years of experience as an executive in the field of agricultural biotechnology and his experience in advising and managing startup companies.

Gary W. Mize has served as a director of the Company since September 2011. Since October 2009, Mr. Mize has held the position of partner and owner at MR & Associates. Mr. Mize served as President of Rawhide Energy LLC, an ethanol company, from April 2007 to April 2009. Mr. Mize also served as non-executive Chairman at Ceres Global AG, a Canadian public company that serves as a vehicle for agribusiness investments, from December 2007 to April 2010, and has served as an independent director of Ceres Global AG and a member of its audit committee since October 2013. Mr. Mize has also served Noble Group, Hong Kong, as Global Chief Operating Officer and Executive Director from July 2003 to December 2005 and as Non-Executive Director from December 2005 to December 2006. Previously, he was President of the Grain Processing Group at ConAgra Foods, Inc., President and Chief Executive Officer of ConAgra Malt and held various positions at Cargill, Inc. Mr. Mize holds a B.A. in Business and Marketing from Michigan State University. Mr. Mize brings international business experience to the board having previously

held expatriate positions in Switzerland, Brazil and Hong Kong. We believe Mr. Mize's qualifications to sit on our board of directors include his international experience, coupled with more than 35 years of experience in agribusiness.

Bruce A. Smith has served as a director of the Company since June 2010. Since January 2012, Mr. Bruce Smith has also served as a director of Ventech Engineers, Inc., a fully integrated engineering and procurement services company for the petroleum industry. In addition, since December 2011, he has served as a director and Chief Executive Officer of One Cypress Energy, a private crude logistics and marketing company. Since July 2010, he has also served as a member of the supervisory board of LyondellBasell Industries N.V., a publicly traded independent chemical company. Mr. Bruce Smith served as Chairman of Tesoro Corp. ("Tesoro") from 1996 until June 2010, and from 1995 until May 2010 he served as Tesoro's President and Chief Executive Officer. Between 1992 and 1995, Mr. Bruce Smith held positions as Tesoro's Chief Operating Officer, Executive Vice President, Exploration and Production, and Chief Financial Officer. Under Mr. Bruce Smith's leadership, Tesoro went from a small integrated oil company to a Fortune 100 refining and marketing company with a global supply chain and 650,000 barrels per day of production in the western U.S. From March 2002 to February 2008, Mr. Bruce Smith also served as a director of Noble Energy Corp., a publicly traded oil exploration and production company, where he served on the audit, compensation and corporate governance and nominating committees, including service as chair of the audit committee in 2005 and 2006 and chair of the compensation committee in 2003 and 2004. Mr. Bruce Smith holds an M.B.A. in finance from the University of Kansas and a B.A. in biology from Westminster College. We believe Mr. Bruce Smith's qualifications to sit on our board of directors include his extensive senior leadership experience in the

refining and marketing industry, his substantial management background and his previous experience serving as a director and chairman of the audit and compensation committees of a publicly traded company.

Stacy J. Smith has served as a director of the Company since June 2010. Since November 2011, Mr. Smith has also served as a director of Autodesk, Inc. Mr. Smith currently serves as Executive Vice President at Intel Corporation ("Intel"), a position he has held since 2010, as well as Chief Financial Officer, a position he has held since 2007, and director of Corporate Strategy. Previously, he was Intel's Assistant Chief Financial Officer from 2006 to 2007, and Vice President, Finance and Enterprise Services and Chief Information Officer from 2004 to 2006, where he was responsible for Intel's Information Technology Group. From 2002 to 2004, Mr. Smith was Intel's Vice President, Sales and Marketing Group, and General Manager of Intel Europe, Middle East and Africa, where he was responsible for product sales and marketing across that region. Before then, he served in various finance positions at Intel, where he has been employed since 1988, working in the U.S., Asia, Europe and Latin America. Mr. Smith holds an M.B.A. in finance from the University of Texas and a B.A. in finance from the University of Texas. Mr. Smith brings global business leadership experience to our board of directors from his current position as Executive Vice President and Chief Financial Officer of Intel. We believe that Mr. Smith's qualifications to sit on our board of directors include his experience serving for over 20 years in various finance and senior management positions for Intel and his experience overseeing and advising on strategy and financial matters, including financial reporting.

Corporate Information

We were incorporated in Delaware in June 2005 under the name Methanotech, Inc. and filed an amendment to our certificate of incorporation changing our name to Gevo, Inc. on March 29, 2006. Our principal executive offices are located at 345 Inverness Drive South, Building C, Suite 310, Englewood, CO 80112, and our telephone number is (303) 858-8358.

Website Access to SEC Filings

We are subject to the reporting requirements under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Consequently, we are required to file reports and information with the SEC, including reports on the following forms: annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. These reports and other information concerning us may be accessed through the SEC's website at http://www.sec.gov and on our website at www.gevo.com. Such filings are placed on our website as soon as reasonably practical after they are filed with the SEC. Any information contained in, or that can be accessed through our website, is not incorporated by reference into, nor is it in any way part of, this Report.

Item 1A. Risk Factors

You should carefully consider the risks described below before investing in our publicly-traded securities. The risks described below are not the only ones facing us. Our business is also subject to the risks that affect many other companies, such as competition, technological obsolescence, labor relations, general economic conditions, geopolitical changes and international operations. Additional risks not currently known to us or that we currently believe are immaterial also may impair our business operations and our liquidity. The risks described below could cause our actual results to differ materially from those contained in the forward-looking statements we have made in this Report, the information incorporated herein by reference and those forward-looking statements we may make from time to time.

Certain Risks Relating to our Business and Strategy

We are a development stage company with a history of net losses, and we may not achieve or maintain profitability.

We have incurred net losses since our inception, including losses of $66.8 million, $60.7 million and $48.2 million during the years ended December 31, 2013, 2012 and 2011. As of December 31, 2013, we had an accumulated deficit of $262.2 million. We expect to incur losses and negative cash flow from operating activities for the foreseeable future. We are a development stage company and, to date, our revenues from the sale of isobutanol and related products have been limited. Prior to September 2010, our revenues were primarily derived from government grants and cooperative agreements. From the completion of our acquisition of Agri-Energy in September 2010 until the commencement of our initial startup operations for isobutanol production in May 2012, we had also generated revenue from the sale of ethanol and related products. Similarly, we may derive revenue from the sale of ethanol and related products during periods in which the production of isobutanol is temporarily paused and our management decides, based on the then-current economic conditions for the production and sale of ethanol, that the Agri-Energy Facility will be temporarily reverted to ethanol production. Additionally, we have generated limited revenue from the sale of products such as ATJ fuel produced from isobutanol that has been used for engine qualification and flight demonstration by the U.S. Air Force and other branches of the U.S. military. Following the commencement of full-scale commercial production of isobutanol, we do not expect to generate significant future revenues from the sale of ethanol at the Agri-Energy Facility. If our existing grants and cooperative agreements are canceled

prior to the expected end dates or we are unable to obtain new grants and cooperative agreements or our ATJ supply contracts are cancelled or we are unable to produce suitable ATJ material, our revenues could be adversely affected.

Furthermore, we expect to spend significant amounts on the further development and commercial implementation of our technology. We also expect to spend significant amounts acquiring and deploying additional equipment to attain final product specifications that may be required by future customers, acquiring or otherwise gaining access to additional ethanol plants and Retrofitting them for isobutanol production, on marketing, general and administrative expenses associated with our planned growth and on management of operations as a public company. In addition, the cost of preparing, filing, prosecuting, maintaining and enforcing patent, trademark and other intellectual property rights and defending ourselves against claims by others that we may be violating their intellectual property rights may be significant.

In particular, over time, the costs of our litigation with Butamax have been and may continue to be significant. Furthermore, over time, costs related to defending the validity of our issued patents and challenging the validity of the patents of others at the U.S. Patent and Trademark Office ("USPTO") have also been and may continue to be significant. As a result, even if our revenues increase substantially, we expect that our expenses will exceed revenues for the foreseeable future. We do not expect to achieve profitability during the foreseeable future, and may never achieve it. If we fail to achieve profitability, or if the time required to achieve profitability is longer than we anticipate, we may not be able to continue our business. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

We will require substantial additional financing to achieve our goals, and a failure to obtain capital when needed or on acceptable terms could force us to delay, limit, reduce or terminate our development and commercialization efforts.

Since our inception, significant portions of our resources have been dedicated to research and development, as well as demonstrating the effectiveness of our technology, including through the Retrofit of the Agri-Energy Facility. We believe that we will continue to expend substantial resources for the foreseeable future on further developing our technologies, developing future markets for our isobutanol and accessing and Retrofitting facilities necessary for the production of isobutanol on a commercial scale. These expenditures will include costs associated with research and development, accessing existing ethanol plants, Retrofitting or otherwise modifying the plants (including the Redfield Facility) to produce isobutanol, obtaining government and regulatory approvals, acquiring or constructing storage facilities and negotiating supply agreements for the isobutanol we produce. In addition, other unanticipated costs may arise. Because the costs of developing our technology at a commercial scale are highly uncertain, we cannot reasonably estimate the amounts necessary to successfully commercialize our production.

To date, we have funded our operations primarily through equity offerings, issuances of debt, borrowing under our secured debt financing arrangements and revenues earned primarily from the sale of ethanol. Based on our current plans and expectations, we will require additional funding to achieve our goals. In addition, the cost of preparing, filing, prosecuting, maintaining and enforcing patent, trademark and other intellectual property rights and defending against claims by others that we may be violating their intellectual property rights, including the current litigation with Butamax, will be significant. Moreover, our plans and expectations may change as a result of factors currently unknown to us, and we may need additional funds sooner than planned and may seek to raise additional funds through public or private debt or equity financings in the near future. We may also choose to seek additional capital sooner than required due to favorable market conditions or strategic considerations.

Our future capital requirements will depend on many factors, including:

the timing of, and costs involved in developing and optimizing our technologies for full-scale commercial production of isobutanol;

the timing of, and costs involved in accessing existing ethanol plants;
the timing of, and costs involved in Retrofitting the plants we access with our technologies;
the costs involved in establishing enhanced yeast seed trains;
the costs involved in acquiring and deploying additional equipment to attain final product specifications that may be required by future customers;
the cost of operating, maintaining and increasing production capacity of the Retrofitted plants;
our ability to negotiate agreements supplying suitable biomass to our plants, and the timing and terms of those agreements;
the timing of, and the costs involved in developing adequate storage facilities for the isobutanol we produce;
our ability to gain market acceptance for isobutanol as a specialty chemical, gasoline blendstock and as a raw material for the production of hydrocarbons;

our ability to negotiate supply agreements for the isobutanol we produce, and the timing and terms of those agreements, including terms related to sales price;
our ability to negotiate sales of our isobutanol for full-scale production of butenes and other industrially useful chemicals and fuels, and the timing and terms of those sales, including terms related to sales price;
our ability to sell the iDGs™ left as a co-product of fermenting isobutanol from corn as animal feedstock;
our ability to establish and maintain strategic partnerships, licensing or other arrangements and the timing and terms of those arrangements; and
the cost of preparing, filing, prosecuting, maintaining, defending and enforcing patent, trademark and other intellectual property claims, including litigation costs and the outcome of such litigation.

Additional funds may not be available when we need them, on terms that are acceptable to us, or at all. In addition, our ability to raise additional funds may be subject to certain limitations in the agreements governing our indebtedness, including our secured indebtedness with TriplePoint. If needed funds are not available to us on a timely basis, we may be required to delay, limit, reduce or terminate:

our research and development activities;
our plans to access and/or Retrofit existing ethanol facilities; our production of isobutanol at Retrofitted plants; and/or
our activities in developing storage capacity and negotiating supply agreements that may be necessary for the commercialization of our isobutanol production.

Our Retrofit of the Agri-Energy Facility is our first commercial Retrofit and, as a result, our full-scale commercial production of isobutanol at the Agri-Energy Facility could be delayed or we could experience significant cost overruns in comparison to our current estimates.

In September 2010, we acquired ownership of the Agri-Energy Facility in Luverne, Minnesota. To date, we have successfully demonstrated fermentation operations at commercial scale combined with the use of our GIFT® separation system using a dextrose (sugar) feedstock at the Agri-Energy Facility. Cost overruns or other unexpected difficulties related to transitioning to sugars obtained from corn mash, increasing production levels at this facility to nameplate capacity and achieving our target customers' product specifications could cause the final Retrofit to take longer or cost more than we anticipate which could increase our need for funding. We may also incur additional costs in order to ensure that the Agri-Energy Facility can produce both isobutanol and ethanol simultaneously. Such funds may not be available when we need them, on terms that are acceptable to us or at all. In addition, our ability to raise additional funds may be subject to certain limitations in the agreements governing our indebtedness, including our secured indebtedness with TriplePoint. If additional funding is not available to us, or not available on terms acceptable to us, our ability to optimize the isobutanol production technology currently in place at the Agri-Energy Facility and achieve full-scale commercial production at this facility may be limited. Such a result could reduce the scope of our business plan and have an adverse effect on our results of operations.

We have entered into a joint venture with Redfield Energy, LLC to Retrofit the Redfield Facility, and our production of isobutanol at the Redfield Facility could be delayed or we could experience significant cost overruns in comparison to our current estimates.

In June 2011, we acquired access to the Redfield Facility, a 50 MGPY ethanol production facility located near Redfield, South Dakota, pursuant to our joint venture with Redfield. We intend to Retrofit this facility to produce isobutanol, and will need access to additional capital in order to commence the Retrofit. Although we will be able to apply our experience from the Retrofit of the Agri-Energy Facility, no two ethanol facilities are exactly alike, and each Retrofit will require individualized engineering and design work. Cost overruns or other unexpected difficulties unique to the Redfield Facility could cause the Retrofit to cost more than we anticipate which could further increase our need for funding. Such funds may not be available when we need them, on terms that are acceptable to us or at all, which could delay our full-scale commercial production of isobutanol at this facility. In addition, our ability to raise additional funds may be subject to certain limitations in the agreements governing our indebtedness, including our

secured indebtedness with TriplePoint. If additional funding is not available to us, or not available on terms acceptable to us, our ability to complete the Retrofit of the Redfield Facility, which is not yet underway, or acquire access to or Retrofit additional ethanol plants may be limited. Such a result could reduce the scope of our business plan and have an adverse effect on our results of operations.

Our ability to compete may be adversely affected if we are unsuccessful in defending against any claims by competitors or others that we are infringing upon their intellectual property rights, such as if Butamax is successful in its lawsuits alleging that we are infringing its patents for the production of isobutanol using certain microbial host cells.

The various bioindustrial markets in which we plan to operate are subject to frequent and extensive litigation regarding patents and other intellectual property rights. In addition, many companies in intellectual property-dependent industries, including the

renewable energy industry, have employed intellectual property litigation as a means to gain an advantage over their competitors. As a result, we may be required to defend against claims of intellectual property infringement that may be asserted by our competitors against us and, if the outcome of any such litigation is adverse to us, it may affect our ability to compete effectively. Currently, we are defending ourselves against lawsuits filed by Butamax alleging that we have infringed eight patents, including five patents covering certain recombinant microbial host cells that produce isobutanol and methods for the production of isobutanol using such host cells, a patent covering a modified Pseudomonas KARI enzyme, a patent covering a modified E. coli KARI enzyme, and a patent covering the use of L. lactis and S. mutans dihydroxy acid dehydratase enzymes in yeast. The litigation with Butamax is dynamic. We have filed complaints alleging infringement of certain of our patents by Butamax and we anticipate that additional patents involving the isobutanol production process that are issued to Butamax, its members or us will be involved in litigation. The next District Court trial for the Butamax litigation is scheduled for July 2014 and additional trials are currently scheduled for August 2014 and 2015. Also, on April 19, 2013 Butamax filed a notice of appeal to the U.S. Court of Appeals for the Federal Circuit to appeal the District Court of Delaware's Memorandum and Order of March 19, 2013, and the District Court of Delaware's Amended Final Judgment of April 10, 2013, relating to Case No. 1:11-cv-00054-SLR. In that case, Butamax alleged that we were infringing one or more claims of U.S. Patent Nos. 7,851,188 and 7,993,889. Following the court's construction of a key term in the patents and its ruling of no infringement under the doctrine of equivalents, Butamax stipulated to no literal infringement under the court's construction and the court entered judgment. The hearing for Butamax's appeal to the U.S. Court of Appeals for the Federal Circuit was held on November 7, 2013. On February 18, 2014, the U.S. Court of Appeals for the Federal Circuit vacated the denial of Butamax's motion for summary judgment of literal infringement of the asserted claims of the '188 Patent and the '889 Patent (each as defined below) by the United States District Court for the District of Delaware (the "Delaware District Court") and remanded the question of infringement to the Delaware District Court for reconsideration under a revised claim construction. The U.S. Court of Appeals for the Federal Circuit also vacated and remanded the Delaware District Court's grant of Gevo's motion for summary judgment of noninfringement under the doctrine of equivalents. The U.S. Court of Appeals for the Federal Circuit also reversed the Delaware District Court's grant of Gevo's motion for summary judgment of invalidity for lack of a written description of claims 12 and 13 of the '889 Patent and the Delaware District Court's order that those same claims are invalid for lack of enablement. The Delaware District Court has scheduled a mediation session between Gevo and Butamax on June 5, 2014.

Our involvement in litigation, interferences, opposition proceedings or other intellectual property proceedings inside and outside of the U.S. may divert management time from focusing on business operations, could cause us to spend significant amounts of money and may have no guarantee of success. Any current and future intellectual property litigation could also force us to do one or more of the following:

- stop selling, incorporating, manufacturing or using our products that use the subject intellectual property;
- obtain from a third party asserting its intellectual property rights, a license to sell or use the relevant technology, which license may not be available on reasonable terms, or at all;
- redesign those products or processes, such as our process for producing isobutanol, that use any allegedly infringing or misappropriated technology, which may result in significant cost or delay to us, or which redesign could be technically infeasible;
- pay attorneys' fees and expenses; or
- pay damages, including the possibility of treble damages in a patent case if a court finds us to have willfully infringed certain intellectual property rights.

We are aware of a significant number of patents and patent applications relating to aspects of our technologies filed by, and issued to, third parties, including, but not limited to Butamax. We cannot assure you that we will ultimately prevail if any of this third-party intellectual property is asserted against us or that we will ultimately prevail in the patent infringement litigation with Butamax.

The Agri-Energy Facility is our first commercial isobutanol production facility, and, as such, we may be unable to produce planned quantities of isobutanol and any such production may be more costly than we anticipate.

Since commencing initial startup operations for the production of isobutanol at the Agri-Energy Facility in May 2012, we have encountered some production challenges, including contamination issues, which have resulted in lower than planned isobutanol production. While we have resumed limited production of isobutanol at the Agri-Energy Facility, this is our first commercial isobutanol production facility and we may encounter further production challenges, including, but not limited to, being unable to manage plant contamination, and we may need to add additional processing steps or incur additional capital expenditures to achieve our target customers' product specifications. Any such production challenges may delay our ramp up of production capacity, prevent us from producing significant quantities of isobutanol, significantly increase our cost to produce isobutanol, or cause us to temporarily switch to producing ethanol or produce both products simultaneously, which could have a material adverse effect on our business, financial condition and results of operations.

Some of our Retrofits, including the Retrofit of the Agri-Energy Facility, may include additional equipment that we believe will allow us to switch between ethanol and isobutanol production, or produce both products simultaneously, but we cannot guarantee that we will be successful in switching between isobutanol and ethanol production, or producing both products simultaneously, in a timely or efficient manner at these facilities.

While we have designed the Retrofit of the Agri-Energy Facility to allow the capability to switch between isobutanol and ethanol production, or produce both products simultaneously, which may, subject to regulatory factors and depending on market conditions, mitigate certain significant risks associated with startup operations for isobutanol production, there can be no assurance that we will be able to revert to ethanol production, or produce both products simultaneously, or that it will make sense, based on the then-current economic conditions for the production of ethanol, to do so. Even if we are able to revert to ethanol production, or produce both products simultaneously, the facility may produce ethanol less efficiently or in lower volumes than it did prior to the Retrofit and such ethanol production may not generate positive economic returns. If we are unable to produce isobutanol at the volumes, rates and costs that we expect and are unable to revert to ethanol production at full capacity, or produce both products simultaneously, we would be unable to match the facility's historical economic performance and our business, financial condition and results of operations would be materially adversely affected.

We may not be successful in the development of individual steps in, or an integrated process for, the production of commercial quantities of isobutanol from plant feedstocks in a timely or economic manner, or at all.

As of December 31, 2013, we have produced only limited quantities of isobutanol at commercial scale and we may not be successful in increasing our production from these limited startup production levels to nameplate production levels. The production of isobutanol requires multiple integrated steps, including:

- obtaining the plant feedstocks;
- treatment with enzymes to produce fermentable sugars;
- fermentation by organisms to produce isobutanol from the fermentable sugars;
- distillation of the isobutanol to concentrate and separate it from other materials;
- purification of the isobutanol; and
- storage and distribution of the isobutanol.

Our future success depends on our ability to produce commercial quantities of isobutanol in a timely and economic manner. Our biocatalysts have not yet produced commercial volumes of isobutanol at nameplate production levels. While we have produced isobutanol using our biocatalysts at our laboratories in Colorado, at the one MGPY demonstration facility and at the Agri-Energy Facility, such production was not at full nameplate capacity. Our startup runs during the first half of 2013 were primarily focused on producing isobutanol from dextrose (sugar) and challenges remain in achieving substantial production volumes with other sugars, including sugars obtained from corn mash. The risk of contamination and other problems rise as we increase the scale of our isobutanol production. If we are unable to successfully manage these risks, we may encounter difficulties in achieving our target isobutanol production yield, rate, concentration or purity at a commercial scale, which could delay or increase the costs involved in commercializing our isobutanol production. In addition, we have limited experience sourcing large quantities of feedstocks and in storing and/or distributing significant volumes of isobutanol. The technological and logistical challenges associated with each of the processes involved in production, sale and distribution of isobutanol are extraordinary, and we may not be able to resolve any difficulties that arise in a timely or cost effective manner, or at all. Even if we are successful in developing an economical process for converting plant feedstocks into commercial quantities of isobutanol, we may not be able to adapt such process to other biomass raw materials, including cellulosic biomass.

Prior to commencement of the Agri-Energy Facility Retrofit, neither we nor ICM had ever built (through Retrofit or otherwise) or operated a commercial isobutanol facility. We assume that we understand how the engineering and

process characteristics of the one MGPY demonstration facility will scale up to larger facilities, but these assumptions may prove to be incorrect. Accordingly, we cannot be certain that we can consistently produce isobutanol in an economical manner in commercial quantities. If our costs to build large-scale commercial isobutanol facilities are significantly higher than we expect or if we fail to consistently produce isobutanol economically on a commercial scale or in commercial volumes, our commercialization of isobutanol and our business, financial condition and results of operations will be materially adversely affected.

We may not be able to successfully identify and acquire access to additional ethanol production facilities suitable for efficient Retrofitting, or acquire access to sufficient capacity to be commercially viable or meet customer demand.

Our strategy currently includes accessing and Retrofitting, either independently or with potential development partners or licensees, existing ethanol facilities for the production of large quantities of isobutanol for commercial distribution and sale. In addition to the Agri-Energy Facility, we have acquired access to the 50 MGPY Redfield Facility pursuant to our joint venture with Redfield. However, we may not find future development partners with whom we can implement this growth strategy, and we may not be able to identify facilities suitable for joint venture, acquisition, lease or license.

Even if we successfully identify a facility suitable for efficient Retrofitting, we may not be able to acquire access to such facility in a timely manner, if at all. The owners of the ethanol facility may reach an agreement with another party, refuse to consider a joint venture, acquisition, lease or license, or demand more or different consideration than we are willing to provide. In particular, if the profitability of ethanol production increases, plant owners may be less likely to consider modifying their production, and thus may be less willing to negotiate with us or agree to allow us to Retrofit their facilities for isobutanol production. We may also find that it is necessary to offer special terms, incentives and/or rebates to owners of ethanol facilities that allow us to access and Retrofit their facilities while our production technology is being proven on a commercial scale. Even if the owners of a facility are interested in reaching an agreement that grants us access to the plant, negotiations may take longer or cost more than we expect, and we may never achieve a final agreement. Further, our ability to raise additional funds may be subject to certain limitations in the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, and we may not be able to raise capital on acceptable terms, or at all, to finance our joint venture, acquisition, participation or lease of facilities.

Even if we are able to access and Retrofit several facilities, we may fail to access enough capacity to be commercially viable or meet the volume demands or minimum requirements of our customers, including pursuant to definitive supply or distribution agreements that we may enter into, which may subject us to monetary damages. For example, under the terms of our international off-take and distribution agreement with Sasol, we are required to pay certain shortfall fees if we are not able to supply Sasol with certain minimum quantities of product. We may also be required to repay funds received from Toray Industries if we are not able to produce and deliver a minimum quantity of bio-PX by April 30, 2014. Failure to acquire access to sufficient capacity in a timely manner and on favorable terms may slow or stop our commercialization process, which could have a material adverse effect on our business, financial condition and results of operations.

Once we acquire access to ethanol facilities, we may be unable to successfully Retrofit them to produce isobutanol, or we may not be able to Retrofit them in a timely and cost-effective manner.

For each ethanol production facility to which we acquire access, we will be required to obtain numerous regulatory approvals and permits to Retrofit and operate the facility. In the U.S., these include such items as a modification to the air permit, fuel registration with the EPA, ethanol excise tax registration and others. These requirements may not be satisfied in a timely manner, or at all. Later-enacted federal and state governmental requirements may also substantially increase our costs or delay or prevent the completion of a Retrofit, which could have a material adverse effect on our business, financial condition and results of operations.

No two ethanol facilities are exactly alike, and each Retrofit will require individualized engineering and design work. There is no guarantee that we or any contractor we retain will be able to successfully design a commercially viable Retrofit, or properly complete the Retrofit once the engineering plans are completed. Prior to commencement of the Agri-Energy Facility Retrofit, neither we nor ICM had ever built, via Retrofit or otherwise, a full-scale commercial isobutanol facility. Despite our experience with the Retrofit of the Agri-Energy Facility, our estimates of the capital

costs that we will need to incur to Retrofit a commercial-scale ethanol facility may prove to be inaccurate, and each Retrofit may cost materially more to engineer and build than we currently anticipate. For example, our estimates assume that each plant we Retrofit will be performing at full production capacity, and we may need to expend substantial sums to repair or modify underperforming facilities prior to Retrofit.

Our Retrofit design to convert existing ethanol production capacity to isobutanol production capacity was developed in cooperation with ICM and is based on ICM technology. There is no guarantee that this Retrofit design will be compatible with existing ethanol facilities that do not utilize ICM technology. Before we can Retrofit such facilities, we may need to modify them to be compatible with our Retrofit design. This may require significant additional expenditure of time and money, and there is no guarantee such modification will be successful.

Furthermore, the Retrofit of acquired facilities will be subject to the risks inherent in the build-out of any manufacturing facility, including risks of delays and cost overruns as a result of factors that may be out of our control, such as delays in the delivery of equipment and subsystems or the failure of such equipment to perform as expected once delivered. In addition, we will depend on third-party relationships in expanding our isobutanol production capacity and such third parties may not fulfill their obligations to us under our arrangements with them. Delays, cost overruns or failures in the Retrofit process will slow our commercial production of isobutanol and harm our performance.

Though our Retrofit design for the Agri-Energy Facility includes the capability to switch between isobutanol and ethanol production, or produce both products simultaneously, we may be unable to successfully revert to ethanol production, or produce both products simultaneously, or the facility may produce ethanol less efficiently or in lower volumes than it did before the Retrofit. In addition, we may be unable to secure the necessary regulatory approvals and permits to switch between isobutanol and ethanol production, or produce both products simultaneously, in a timely manner, or at all. Thus, if we fail to achieve commercial levels of isobutanol production at a Retrofitted facility, we may be unable to rely on ethanol production as an alternative or additional revenue source, which could have a material adverse effect on our prospects.

Our facilities and process may fail to produce isobutanol at the volumes, rates and costs we expect.

Some or all of the facilities we choose to Retrofit may be in locations distant from corn or other feedstock sources, which could increase our feedstock costs or prevent us from acquiring sufficient feedstock volumes for commercial production. General market conditions might also cause increases in feedstock prices, which could likewise increase our production costs.

Even if we secure access to sufficient volumes of feedstock, the facilities we Retrofit for isobutanol production may fail to perform as expected. The equipment and subsystems installed during the Retrofit may never operate as planned. Our systems may prove incompatible with the original facility, or require additional modification after installation. Our biocatalyst may perform less efficiently than it did in testing, if at all. Contamination of plant equipment may require us to replace our biocatalyst more often than expected, require unplanned installation or replacement of equipment, or cause our fermentation process to yield undesired or harmful by-products. Likewise, our feedstock may contain contaminants like wild yeast, which naturally ferments feedstock into ethanol. The presence of contaminants, such as wild yeast, in our feedstock could reduce the purity of the isobutanol that we produce and require us to invest in more costly isobutanol separation processes or equipment. Unexpected problems may force us to cease or delay production and the time and costs involved with such delays may prove prohibitive. Any or all of these risks could prevent us from achieving the production throughput and yields necessary to achieve our target annualized production run rates and/or to meet the volume demands or minimum requirements of our customers, including pursuant to definitive supply or distribution agreements that we may enter into, which may subject us to monetary damages. For example, under the terms of our international off-take and distribution agreement with Sasol, we are required to pay certain shortfall fees if we are not able to supply Sasol with certain minimum quantities of product. We may also be required to repay funds received from Toray Industries if we are not able to produce and deliver a minimum quantity of bio-PX by April 30, 2014. Failure to achieve these rates or meet these minimum requirements, or achieving them only after significant additional expenditures, could substantially harm our commercial performance.

We may be unable to produce isobutanol in accordance with customer specifications.

Even if we produce isobutanol at our targeted rates, we may be unable to produce isobutanol that meets customer specifications as defined in ASTM D7862 “Standard Specification for Butanol for Blending with Gasoline for Use as Automotive Spark-Ignition Engine Fuel.” We may need to add additional processing steps or incur capital expenditures in order to meet customer specifications which could add significant costs to our production process. For example, at the Agri-Energy Facility we intend to acquire and install a product purification column, which we believe will allow us to achieve our target customers’ product specifications without continuing to rely on third-party contract tolling providers. If we fail to meet specific product or volume specifications contained in a supply agreement, the customer may have the right to seek an alternate supply of isobutanol and/or terminate the agreement completely, and we could be required to pay shortfall fees or otherwise be subject to damages. For example, under the terms of our international off-take and distribution agreement with Sasol, we are required to meet defined high-purity isobutanol product standards. A failure to successfully meet the specifications of our potential customers could decrease demand, and significantly hinder market adoption of our products.

We lack significant experience operating commercial-scale ethanol and isobutanol facilities, and may encounter substantial difficulties operating commercial plants or expanding our business.

We have very limited experience operating commercial-scale ethanol and isobutanol facilities. Accordingly, we may encounter significant difficulties operating at a commercial scale. We believe that our future facilities will, like the Agri-Energy Facility, be able to continue producing ethanol during much of the Retrofit process. We will need to successfully administer and manage this production. Though ICM and the employees of Agri-Energy and Redfield are experienced in the operation of ethanol facilities, and our future development partners or the entities that we acquire may likewise have such experience, we may be unable to manage ethanol-producing operations, especially given the possible complications associated with a simultaneous Retrofit. Once we complete a commercial Retrofit, operational difficulties may increase, because neither we nor anyone else has significant experience operating a pure isobutanol fermentation facility at a commercial scale. The skills and knowledge gained in operating commercial ethanol facilities or small-scale isobutanol plants may prove insufficient for successful operation of a large-scale isobutanol facility, and we may be required to expend significant time and money to develop our capabilities in isobutanol facility operation. We may also need to hire new employees or contract with third parties to help manage our operations, and our performance will suffer if we are unable to hire qualified parties or if they perform poorly.

We may face additional operational difficulties as we further expand our production capacity. Integrating new facilities with our existing operations may prove difficult. Rapid growth, resulting from our operation of, or other involvement with, isobutanol facilities or otherwise, may impose a significant burden on our administrative and operational resources. To effectively manage our growth and execute our expansion plans, we will need to expand our administrative and operational resources substantially and attract, train, manage and retain qualified management, technicians and other personnel. We may be unable to do so. Failure to meet the operational challenges of developing and managing increased isobutanol production, or failure to otherwise manage our growth, may have a material adverse effect on our business, financial condition and results of operations.

We may have difficulty adapting our technology to commercial-scale fermentation, which could delay or prevent our commercialization of isobutanol.

While we have demonstrated the ability to produce isobutanol under the demonstration plant operating conditions and under commercial scale operating conditions at the Agri-Energy Facility, and we have succeeded in reaching our commercial fermentation performance targets for isobutanol concentration, fermentation productivity and isobutanol yield in laboratory tests, we have not yet accomplished these performance targets in a commercial plant environment. Our efforts to address lower than expected production rates at the Agri-Energy Facility during our initial startup operations resulted in our decision to temporarily pause isobutanol production at the facility in September 2012.

Ultimately, our yeast biocatalyst may not be able to meet the commercial performance targets at nameplate production capacity using sugars obtained from corn mash in a timely manner, or ever. In addition, the risk of contamination and other problems may increase as we seek to ramp up our production capacity, which could negatively impact our cost of production. If we encounter difficulties in optimizing our production, our commercialization of isobutanol and our business, financial condition and results of operations will be materially adversely affected.

We may have difficulties gaining market acceptance and successfully marketing our isobutanol to customers, including chemical producers, fuel distributors and refiners.

A key component of our business strategy is to market our isobutanol to chemical producers, fuels distributors and refiners. We have no experience marketing isobutanol on a commercial scale and we may fail to successfully negotiate marketing agreements in a timely manner or on favorable terms. If we fail to successfully market our isobutanol to refiners, fuels distributors and chemical producers, our business, financial condition and results of operations will be materially adversely affected.

We also intend to market our isobutanol to chemical producers for use in making various chemicals such as isobutylene, a type of butene that can be produced through the dehydration of isobutanol. Although a significant market currently exists for isobutylene produced from petroleum, which is widely used in the production of plastics, specialty chemicals, alkylate for gasoline blending and high octane aviation gasoline, no one has successfully created isobutylene on a commercial scale from bio-isobutanol. Therefore, to gain market acceptance and successfully market our isobutanol to chemical producers, we must show that our isobutanol can be converted into isobutylene at a commercial scale. As no company currently dehydrates commercial volumes of isobutanol into isobutylene, we must demonstrate the large-scale feasibility of the process and reach agreements with companies that are willing to invest in the necessary dehydration infrastructure. Failure to reach favorable agreements with these companies, or the inability of their plants to convert isobutanol into isobutylene at sufficient scale, will slow our development in the chemicals market and could significantly affect our profitability.

Obtaining market acceptance in the chemicals industry is complicated by the fact that many potential chemicals industry customers have invested substantial amounts of time and money in developing petroleum-based production channels. These potential customers generally have well-developed manufacturing processes and arrangements with

suppliers of chemical components, and may display substantial resistance to changing these processes. Pre-existing contractual commitments, unwillingness to invest in new infrastructure, distrust of new production methods and lengthy relationships with current suppliers may all slow market acceptance of isobutanol.

No market currently exists for isobutanol as a fuel or as a gasoline blendstock. Therefore, to gain market acceptance and successfully market our isobutanol to fuels distributors and refiners, we must effectively demonstrate the commercial advantages of using isobutanol over other biofuels and blendstocks, as well as our ability to produce isobutanol reliably on a commercial scale at a sufficiently low cost. We must show that isobutanol is compatible with existing infrastructure and does not damage pipes, engines, storage facilities or pumps. We must also overcome marketing and lobbying efforts by producers of other biofuels and blendstocks, including ethanol, many of whom may have greater resources than we do. If the markets for isobutanol as a fuel or as a gasoline blendstock do not develop as we currently anticipate, or if we are unable to penetrate these markets successfully, our revenue and revenue growth rate, if any, could be materially and adversely affected.

We believe that consumer demand for environmentally sensitive products will drive demand among large brand owners for renewable hydrocarbon sources. One of our marketing strategies is to leverage this demand to obtain commitments from large brand owners to purchase products made from our isobutanol by third parties. We believe these commitments will, in turn, promote chemicals industry demand for our isobutanol. If consumer demand for environmentally sensitive products fails to develop at sufficient scale or if such demand fails to drive large brand owners to seek sources of renewable hydrocarbons, our revenue and growth rate could be materially and adversely affected.

We may face substantial delay in getting regulatory approvals for use of our isobutanol in the fuels and chemicals markets, which could substantially hinder our ability to commercialize our products.

Large-scale commercialization of our isobutanol may require approvals from state and federal agencies. Before we can sell isobutanol as a fuel or as a gasoline blendstock directly to large petroleum refiners, we must receive EPA fuel certification. We have filed EPA Part 79 registration to move our small business registration to a full registration (including Tier 1 EPA testing), and the approval process may require significant time. Approval can be delayed for years, and there is no guarantee of receiving it. Additionally, California requires that fuels meet both its fuel certification requirements and a separate state low-carbon fuel standard. Any delay in receiving approval will slow or prevent the commercialization of our isobutanol for fuel markets, which could have a material adverse effect on our business, financial condition and results of operations.

With respect to the chemicals markets, we plan to focus on isobutanol production and sell to companies that can convert our isobutanol into other chemicals, such as isobutylene. However, should we later decide to produce these other chemicals ourselves, we may face similar requirements for EPA and other regulatory approvals. Approval, if ever granted, could be delayed for substantial amounts of time, which could significantly harm the development of our business and prevent the achievement of our goals.

Our isobutanol fermentation process utilizes a genetically modified organism which, when used in an industrial process, is considered a new chemical under the EPA's Toxic Substances Control Act ("TSCA"). The TSCA requires us to comply with the EPA's Microbial Commercial Activity Notice process to operate plants producing isobutanol using our biocatalysts. The TSCA's new chemicals submission policies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of our isobutanol production.

There are various third-party certification organizations, such as ASTM and Underwriters' Laboratories, Inc., involved in standard-setting regarding the transportation, dispensing and use of liquid fuel in the U.S. and abroad. These organizations may change the current standards and additional requirements may be enacted that could prevent or delay approval of our products. The process of seeking required approvals and the continuing need for compliance with applicable standards may require the expenditure of substantial resources, and there is no guarantee that we will satisfy these standards in a timely manner, if ever.

In addition, to Retrofit or otherwise modify ethanol facilities and operate the Retrofitted and modified plants to produce isobutanol, we will need to obtain and comply with a number of permit requirements. As a condition to granting necessary permits, regulators may make demands that could increase our Retrofit, modification or operations costs, and permit conditions could also restrict or limit the extent of our operations, which could delay or prevent our commercial production of isobutanol. We cannot guarantee that we will be able to meet all regulatory requirements or obtain and comply with all necessary permits to complete our planned ethanol plant Retrofits, and failure to satisfy these requirements in a timely manner, or at all, could have a substantial negative effect on our performance.

Jet fuels must meet various statutory and regulatory requirements before they may be used in commercial aviation. In the U.S., the use of specific jet fuels is regulated by the Federal Aviation Administration ("FAA"). Rather than directly

approving specific fuels, the FAA certifies individual aircraft for flight. This certification includes authorization for an aircraft to use the types of fuels specified in its flight manual. To be included in an aircraft's flight manual, the fuel must meet standards set by ASTM. The current ASTM requirements do not permit the use of jet fuel derived from isobutanol, and we will need to give ASTM sufficient data to justify creating a new standard applicable to ATJ. Though our work testing isobutanol-based ATJ with the U.S. Air Force Research Laboratory has provided us with data we believe ASTM will take into consideration, the process of seeking required approvals and the continuing need for compliance with applicable statutes and regulations will require the expenditure of substantial resources. Failure to obtain regulatory approval in a timely manner, or at all, could have a significant negative effect on our operations.

We may be unable to successfully negotiate final, binding terms related to our current non-binding isobutanol supply and distribution agreements, which could harm our commercial prospects.

In addition to a limited number of definitive supply and distribution agreements, we have agreed to preliminary terms regarding supplying isobutanol or the products derived from it to various companies for their use or further distribution, including LANXESS, United Airlines, and TOTAL PETROCHEMICALS USA, Inc. We may be unable to negotiate final terms with these or other companies in a timely manner, or at all, and there is no guarantee that the terms of any final agreement will be the same or similar to

those currently contemplated in our preliminary agreements. Final terms may include less favorable pricing structures or volume commitments, more expensive delivery or purity requirements, reduced contract durations and other adverse changes. Delays in negotiating final contracts could slow our initial isobutanol commercialization, and failure to agree to definitive terms for sales of sufficient volumes of isobutanol could prevent us from growing our business. To the extent that terms in our initial supply and distribution contracts may influence negotiations regarding future contracts, the failure to negotiate favorable final terms related to our current preliminary agreements could have an especially negative impact on our growth and profitability. Additionally, as we have yet to produce or supply commercial volumes of isobutanol to any customer, we have not demonstrated that we can meet the production levels contemplated in our current non-binding supply agreements. If our production scale-up proceeds more slowly than we expect, or if we encounter difficulties in successfully completing plant Retrofits, potential customers, including those with whom we have current letters of intent, may be less willing to negotiate definitive supply agreements, or demand terms less favorable to us, and our performance may suffer.

Even if we are successful in consistently producing isobutanol on a commercial scale, we may not be successful in negotiating sufficient supply agreements for our production.

We expect that many of our customers will be large companies with extensive experience operating in the fuels or chemicals markets. As a development stage company, we lack commercial operating experience, and may face difficulties in developing marketing expertise in these fields. Our business model relies upon our ability to successfully negotiate and structure long-term supply agreements for the isobutanol we produce. Many of our potential customers may be more experienced in these matters than we are, and we may fail to successfully negotiate these agreements in a timely manner or on favorable terms which, in turn, may force us to slow our production, delay our acquiring and Retrofitting of additional plants, dedicate additional resources to increasing our storage capacity and/or dedicate resources to sales in spot markets. Furthermore, should we become more dependent on spot market sales, our profitability will become increasingly vulnerable to short-term fluctuations in the price and demand for petroleum-based fuels and competing substitutes.

Even if we are successful in consistently producing isobutanol on a commercial scale, we may not be successful in negotiating pricing terms sufficient to generate positive results from operations at the Agri-Energy Facility.

We expect that many of our customers will be large companies with extensive experience operating in the fuels or chemicals markets. As a development stage company, we lack commercial operating experience, and may face difficulties in developing marketing expertise in these fields. Our business model relies upon our ability to negotiate pricing terms for the isobutanol we produce that generate positive results from the operations of the Agri-Energy Facility. Many of our potential customers may be more experienced in these matters than we are. We may fail to negotiate these agreements in a timely manner, which may force us to dedicate resources to sales in spot markets. If we become more dependent on spot market sales our profitability will become increasingly vulnerable to short-term fluctuations in the price and demand for our products.

Our isobutanol may encounter physical or regulatory issues, which could limit its usefulness as a gasoline blendstock.

In the gasoline blendstock market, isobutanol can be used in conjunction with, or as a substitute for, ethanol and other widely used fuel oxygenates, and we believe our isobutanol will be physically compatible with typical gasoline engines. However, there is a risk that under actual engine conditions, isobutanol will face significant limitations, making it unsuitable for use in high percentage gasoline blends. Additionally, current regulations limit gasoline blends to low percentages of isobutanol, and also limit combination isobutanol-ethanol blends. Government agencies may maintain or even increase the restrictions on isobutanol gasoline blends. As we believe that the potential to use isobutanol in higher percentage blends than is feasible for ethanol will be an important factor in successfully marketing isobutanol to refiners, a low blend wall could significantly limit commercialization of isobutanol as a

gasoline blendstock.

Our isobutanol may be less compatible with existing refining and transportation infrastructure than we believe, which may hinder our ability to market our product on a large scale.

We developed our business model based on our belief that our isobutanol is fully compatible with existing refinery infrastructure. For example, when making isobutanol blends, we believe that gasoline refineries will be able to pump our isobutanol through their pipes and blend it in their existing facilities without damaging their equipment. If our isobutanol proves unsuitable for such handling, it will be more expensive for refiners to use our isobutanol than we anticipate, and they may be less willing to adopt it as a gasoline blendstock, forcing us to seek alternative purchasers.

Likewise, our plans for marketing our isobutanol are based upon our belief that it will be compatible with the pipes, tanks and other infrastructure currently used for transporting, storing and distributing gasoline. If our isobutanol or products incorporating our isobutanol cannot be transported with this equipment, we will be forced to seek alternative transportation arrangements, which will make our isobutanol and products produced from our isobutanol more expensive to transport and less appealing to potential customers. Reduced compatibility with either refinery or transportation infrastructure may slow or prevent market adoption of our isobutanol, which could substantially harm our performance.

We may be required to obtain additional regulatory approvals for use of our iDGs™ as animal feed, which could delay our ability to sell iDGs™ increasing our net cost of production and harming our operating results.

Most of the ethanol plants we initially plan to Retrofit use dry-milled corn as a feedstock. Once we have optimized our full-scale commercial isobutanol production process, we plan to sell, as animal feed, the iDGs™ left as a co-product of fermenting isobutanol from dry-milled corn. We believe that this will enable us to offset a significant portion of the expense of purchasing corn for fermentation. We are currently approved to sell iDGs™ as animal feed through a self-assessed Generally Regarded as Safe (GRAS) process via third party scientific review. In order to improve the value of our iDGs™, we are also in the process of obtaining U.S. Food and Drug Administration ("FDA") approval for the marketing of our iDGs™. We believe obtaining FDA approval will increase the value of our iDGs™ by offering customers of our iDGs™ further assurance of the safety of our iDGs™. If we make changes in our biocatalyst whereby we can no longer rely on our GRAS process, we would be required to obtain FDA approval for marketing our iDGs™. FDA testing and approval can take a significant amount of time, and there is no guarantee that we will ever receive such approval. If FDA approval is delayed or never obtained, or if we are unable to secure market acceptance for our iDGs™, our net cost of production will increase, which may hurt our operating results.

Our development strategy relies heavily on our relationship with ICM.

We rely heavily upon our relationship with ICM. In October 2008, we entered into a development agreement and a commercialization agreement with ICM, each of which has since been amended. Pursuant to the terms of the development agreement, ICM engineers helped us install the equipment necessary to test and develop our isobutanol fermentation process at ICM's one MGPY ethanol demonstration facility, and ICM agreed to assist us in running and maintaining the converted plant. We have used the demonstration plant to improve our biocatalysts and to develop processes for commercial-scale production of isobutanol. Under the commercialization agreement, as amended, ICM serves as our exclusive engineering, procurement and construction ("EPC") contractor for the Retrofit of ethanol plants, and we serve as ICM's exclusive technology partner for the production of butanols, pentanols and propanols from the fermentation of sugars. In August 2011, we entered into a work agreement with ICM. Pursuant to the terms of the work agreement, ICM provides EPC services for the Retrofit of ethanol plants.

Because ICM has designed a significant number of the current operating ethanol production facilities in the U.S., we believe that our exclusive alliance with ICM will provide us with a competitive advantage and allow us to more quickly achieve commercial-scale production of isobutanol. However, ICM may fail to fulfill its obligations to us under our agreements and under certain circumstances, such as a breach of confidentiality by us, can terminate the agreements. In addition, ICM may assign the agreements without our consent in connection with a change of control. Since adapting our technology to commercial-scale production of isobutanol and then Retrofitting ethanol plants to use our technology is a major part of our commercialization strategy, losing our exclusive alliance with ICM would slow our technological and commercial development. It could also force us to find a new contractor with less experience than ICM in designing and building ethanol plants, or to invest the time and resources necessary to Retrofit plants on our own. Such Retrofits may be less successful than if performed by ICM engineers, and Retrofitted plants might operate less efficiently than expected. This could substantially hinder our ability to expand our production capacity, and could severely impact our performance. If ICM fails to fulfill its obligations to us under our agreements and our competitors obtain access to ICM's expertise, our ability to realize continued development and commercial benefits from our alliance could be affected. Accordingly, if we lose our exclusive alliance with ICM, if ICM terminates or breaches its agreements with us, or if ICM assigns its agreements with us to a competitor of ours or to a third party that is not willing to work with us on the same terms or commit the same resources, our business and prospects could be harmed.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies.

We may, subject to certain limitations in the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, seek additional capital through a combination of public and private equity offerings, debt financings, strategic partnerships and licensing arrangements. To the extent that we raise additional capital through the sale or issuance of equity, warrants or convertible debt securities, your ownership interest will be diluted, and the terms of such securities may include liquidation or other preferences that adversely affect your rights as a stockholder. If we raise capital through debt financing, it may involve agreements that include covenants further limiting or restricting our ability to take certain actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through strategic partnerships or licensing agreements with third parties, we may have to relinquish valuable rights to our technologies, or grant licenses on terms that are not favorable to us. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our development and commercialization efforts.

Our quarterly operating results may fluctuate in the future. As a result, we may fail to meet or exceed the expectations of investment research analysts or investors, which could cause our stock price to decline.

Our financial condition and operating results have varied significantly in the past and may continue to fluctuate from quarter to quarter and year to year in the future due to a variety of factors, many of which are beyond our control. Factors relating to our business that may contribute to these fluctuations are described elsewhere in this Report and other reports that we have filed with the SEC. Accordingly, the results of any prior quarterly or annual periods should not be relied upon as indications of our future operating performance.

Fluctuations in the price of corn and other feedstocks may affect our cost structure.

Our approach to the biofuels and chemicals markets will be dependent on the price of corn and other feedstocks that will be used to produce isobutanol. A decrease in the availability of plant feedstocks or an increase in the price may have a material adverse effect on our financial condition and operating results. At certain levels, prices may make these products uneconomical to use and produce, as we may be unable to pass the full amount of feedstock cost increases on to our customers.

The price and availability of corn and other plant feedstocks may be influenced by general economic, market and regulatory factors. These factors include weather conditions, farming decisions, government policies and subsidies with respect to agriculture and international trade, and global demand and supply. For example, corn prices may increase significantly in response to drought conditions in the Midwestern region of the U.S. and any concerns that a resulting decrease in the supply of corn could lead to the restriction of corn supplies, which in turn could cause further increases in the price of corn. The significance and relative impact of these factors on the price of plant feedstocks is difficult to predict, especially without knowing what types of plant feedstock materials we may need to use.

Fluctuations in the price and availability of natural gas may harm our performance.

The ethanol facilities that we have Retrofitted or plan to Retrofit to produce isobutanol, including the Agri-Energy Facility and the Redfield Facility, use significant amounts of natural gas to produce ethanol. After Retrofit with our GIFT® technology, these facilities will continue to require natural gas to produce isobutanol. Accordingly, our business is dependent upon natural gas supplied by third parties. Should the price of natural gas increase, our performance could suffer. Likewise, disruptions in the supply of natural gas could have a material impact on our business and results of operations.

Fluctuations in petroleum prices and customer demand patterns may reduce demand for biofuels and bio-based chemicals.

We anticipate marketing our biofuel as an alternative to petroleum-based fuels. Therefore, if the price of oil falls, any revenues that we generate from biofuel products could decline, and we may be unable to produce products that are a commercially viable alternative to petroleum-based fuels. Additionally, demand for liquid transportation fuels, including biofuels, may decrease due to economic conditions or otherwise. We will encounter similar risks in the chemicals industry, where declines in the price of oil may make petroleum-based hydrocarbons less expensive, which could reduce the competitiveness of our bio-based alternatives.

Changes in the prices of distiller’s grains and iDGs™ could have a material adverse effect on our financial condition.

From September 2010 through May 2012, we sold distiller’s grains as a co-product from the production of ethanol at the Agri-Energy Facility. Similarly, we plan to sell distiller’s grains during any period in which the production of isobutanol is temporarily paused and our management decides, based on the then-current economic conditions for the

production of ethanol, that the Agri-Energy Facility will be temporarily reverted to ethanol production, or produce both products simultaneously. We may also sell distiller's grains produced by other ethanol facilities that we acquire, enter into a joint venture or tolling arrangement with, or license to in the future. We also plan to sell the iDGs™ that will be produced as a co-product of our commercial isobutanol production. Distiller's grains and iDGs™ compete with other animal feed products, and decreases in the prices of these other products could decrease the demand for and price of distiller's grains and iDGs™. Additionally, we have not yet produced commercial iDGs™ and, as such, there is a risk that our iDGs™ may not meet market requirements. If the price of distiller's grains and iDGs™ decreases or our iDGs™ do not meet market requirements, our revenue from the sale of distiller's grains and future revenue from the sale of iDGs™ could suffer, which could have a material adverse effect on our financial condition.

To the extent that we produce ethanol at accessed plants before commencing isobutanol production, or during periods in which we make the strategic decision to revert to ethanol production or produce both products simultaneously, we will be vulnerable to fluctuations in the price of and cost to produce ethanol.

We believe that, like the Agri-Energy Facility, the other ethanol production facilities we access can continue to produce ethanol during most of the Retrofit process. In certain cases, we expect to obtain income from this ethanol production. Further, we have designed our isobutanol production technology (including the Retrofit of the Agri-Energy Facility) to allow us to revert to ethanol production at certain facilities, or produce both products simultaneously, when the economic conditions for ethanol production make such production desirable. Our earnings from ethanol revenue will be dependent on the price of, demand for and cost to produce ethanol. Decreases in the price of ethanol, whether caused by decreases in gasoline prices, changes in regulations, seasonal fluctuations or otherwise, will reduce our revenues, while increases in the cost of production will reduce our margins. Many of these risks, including fluctuations in feedstock costs and natural gas costs, are identical to risks we will face in the production of isobutanol. To the extent that ethanol production costs increase or price decreases, earnings from ethanol production could suffer, which could have a material adverse effect on our business.

Unfavorable weather conditions led to a smaller than expected corn harvest across affected areas of the U.S. Midwest region in the fall of 2012. This, along with smaller corn carryover in the last two crop years and higher export demand for corn led to higher corn prices during 2012 and the first half of 2013 and increased corn price volatility. The price of ethanol during that time did not keep pace with rising corn prices which resulted in lower and, in some instances negative, operating margins in the ethanol industry. As a result, during the fourth quarter of 2012, our management determined that the production of ethanol at the Agri-Energy Facility would not produce a positive margin versus maintaining the Agri-Energy Facility at idle. As a result, at December 31, 2012, we had an inventory of corn that was not being used while production at the Agri-Energy Facility remained paused. During 2013, we did not transition back to ethanol production because we were engaged in activities at the Agri-Energy Facility to optimize specific parts of our technology to further enhance isobutanol production rates. Accordingly, we opted to sell some of our corn inventory on hand to reduce corn inventory levels. Our sale of corn on the spot market subjects us to the risk that corn prices will be even higher when production at the facility permanently resumes and we need to reestablish our corn inventory levels. Our inability to rely on ethanol production as an alternative revenue source due to rising corn prices or otherwise could have a material adverse effect on our business, financial condition and results of operations.

Reductions or changes to existing regulations and policies may present technical, regulatory and economic barriers, all of which may significantly reduce demand for biofuels or our ability to supply isobutanol.

The market for biofuels is heavily influenced by foreign, federal, state and local government regulations and policies. For example, in 2007, the U.S. Congress passed an alternative fuels mandate that required nearly 14 billion gallons of liquid transportation fuels sold in 2011 to come from alternative sources, including biofuels, a mandate that grows to 36 billion gallons by 2022. Of this amount, a minimum of 21 billion gallons must be advanced biofuels as defined by the U.S. Congress. The EPA has set the renewable fuels volume requirement for 2013 at 16.55 billion gallons. In the U.S., and in a number of other countries, these regulations and policies have been modified in the past and may be modified again in the future. Any reduction in mandated requirements for fuel alternatives and additives to gasoline may cause the demand for biofuels to decline and deter investment in the research and development of biofuels. For example, the Energy and Commerce Committee of the U.S. House of Representatives has undertaken an assessment of the RFS program and has published five white papers on the subject during the current congressional period. The EPA has also said that it plans to assess the E10 blendwall and current infrastructure and market-based limitations to the consumption of ethanol in gasoline-ethanol blends above E10. In particular, the EPA is proposing to cut the volume requirements for advanced biofuels by more than 40% when compared to the requirements currently written into the statue. This proposal has created significant concern throughout the biofuels industry, many of which were voiced by the biofuels industry during the public comment period. This type of legislative activity can create concern

in the marketplace about the long-term sustainability of governmental policies. The absence of tax credits, subsidies and other incentives in the U.S. and foreign markets for biofuels, or any inability of our customers to access such credits, subsidies and incentives, may adversely affect demand for our products, which would adversely affect our business. The resulting market uncertainty regarding current and future standards and policies may also affect our ability to develop new renewable products or to license our technologies to third parties and to sell products to our end customers.

Concerns associated with biofuels, including land usage, national security interests and food crop usage, continue to receive legislative, industry and public attention. This attention could result in future legislation, regulation and/or administrative action that could adversely affect our business. Any inability to address these requirements and any regulatory or policy changes could have a material adverse effect on our business, financial condition and results of operations.

Additionally, like the ethanol facilities that we Retrofit, our isobutanol plants will emit greenhouse gases. Any changes in state or federal emissions regulations, including the passage of cap-and-trade legislation or a carbon tax, could limit our production of isobutanol and iDGs™ and increase our operating costs, which could have a material adverse effect on our business, financial condition and results of operations.

If we engage in additional acquisitions, we will incur a variety of costs and may potentially face numerous risks that could adversely affect our business and operations.

If appropriate opportunities become available, we expect to acquire businesses, assets, technologies or products to enhance our business in the future. In connection with any future acquisitions, we could, subject to certain limitations in the agreements governing our indebtedness, including our secured indebtedness with TriplePoint:

- issue additional equity securities which would dilute our current stockholders;
- incur substantial debt to fund the acquisitions; or
- assume significant liabilities.

Acquisitions involve numerous risks, including problems integrating the purchased operations, technologies or products, unanticipated costs and other liabilities, diversion of management's attention from our core business, adverse effects on existing business relationships with current and/or prospective partners, customers and/or suppliers, risks associated with entering markets in which we have no or limited prior experience and potential loss of key employees. Other than our acquisition of Agri-Energy, we have not engaged in acquisitions in the past, and do not have experience in managing the integration process. Therefore, we may not be able to successfully integrate any businesses, assets, products, technologies or personnel that we might acquire in the future without a significant expenditure of operating, financial and management resources, if at all. The integration process could divert management time from focusing on operating our business, result in a decline in employee morale and cause retention issues to arise from changes in compensation, reporting relationships, future prospects or the direction of the business. In addition, we may acquire companies that have insufficient internal financial controls, which could impair our ability to integrate the acquired company and adversely impact our financial reporting. If we fail in our integration efforts with respect to acquisitions and are unable to efficiently operate as a combined organization, our business, financial condition and results of operations may be materially adversely affected.

If we engage in additional joint ventures, we will incur a variety of costs and may potentially face numerous risks that could adversely affect our business and operations.

If appropriate opportunities become available, we expect to enter into joint ventures with the owners of existing ethanol production facilities in order to acquire access to additional isobutanol production capacity. We currently anticipate that in each such joint venture, the ethanol producer would contribute access to its existing ethanol production facility and we would be responsible for Retrofitting such facility to produce isobutanol. Upon completion of the Retrofit, and in some cases the attainment of certain performance targets, both parties to the joint venture would receive a portion of the profits from the sale of isobutanol, consistent with our business model. In connection with these joint ventures, we could incur substantial debt to fund the Retrofit of the accessed facilities and we could assume significant liabilities.

Realizing the anticipated benefits of joint ventures, including projected increases to production capacity and additional revenue opportunities, involves a number of potential challenges. The failure to meet these challenges could seriously harm our financial condition and results of operations. Joint ventures are complex and time-consuming and we may encounter unexpected difficulties or incur unexpected costs related to such arrangements, including:

- difficulties negotiating joint venture agreements with favorable terms and establishing relevant performance metrics;
- difficulties completing the Retrofits of the accessed facilities using our integrated fermentation technology;
- the inability to meet applicable performance targets related to the production of isobutanol;
- difficulties obtaining the permits and approvals required to produce and sell our products in different geographic areas;
- complexities associated with managing the geographic separation of accessed facilities;
- diversion of management attention from ongoing business concerns to matters related to the joint ventures;

difficulties maintaining effective relationships with personnel from different corporate cultures; and
the inability to generate sufficient revenue to offset Retrofit costs.

Additionally, our joint venture partners may have liabilities or adverse operating issues that we fail to discover through due diligence prior to entering into the joint ventures. In particular, to the extent that our joint venture partners failed to comply with or otherwise violated applicable laws or regulations, or failed to fulfill their contractual obligations, we may suffer financial harm and/or reputational harm for these violations or otherwise be adversely affected.

Our joint venture partners may have significant amounts of existing debt and may not be able to service their existing debt obligations, which could cause the failure of a specific project and the loss by us of any investment we have made to Retrofit the facilities owned by the joint venture partner. In addition, if we are unable to meet specified performance targets related to the production of isobutanol at a facility owned by one of our joint venture partners, we may never become eligible to receive a portion of the profits of the joint venture and may be unable to recover the costs of Retrofitting the facility. Additionally, we plan to be the sole marketer for all isobutanol and co-products produced using our proprietary technology including, without limitation, all isobutanol that is produced by any facilities that we access via joint venture. Marketing agreements can be very complex and the obligations that we assume as the sole marketer of isobutanol may be time consuming. We have no experience marketing isobutanol on a commercial scale and we may fail to successfully negotiate marketing agreements in a timely manner or on favorable terms. If we fail to successfully market the isobutanol produced using our proprietary technology to refiners and chemical producers, our business, financial condition and results of operations will be materially adversely affected.

If we lose key personnel, including key management personnel, or are unable to attract and retain additional personnel, it could delay our product development programs and harm our research and development efforts, we may be unable to pursue partnerships or develop our own products and it may trigger an event of default under the agreements governing our indebtedness, including our secured indebtedness with TriplePoint.

Our business is complex and we intend to target a variety of markets. Therefore, it is critical that our management team and employee workforce are knowledgeable in the areas in which we operate. The loss of any key members of our management, including our named executive officers, or the failure to attract or retain other key employees who possess the requisite expertise for the conduct of our business, could prevent us from developing and commercializing our products for our target markets and entering into partnerships or licensing arrangements to execute our business strategy. In addition, the loss of any key scientific staff, or the failure to attract or retain other key scientific employees, could prevent us from developing and commercializing our products for our target markets and entering into partnerships or licensing arrangements to execute our business strategy. We may not be able to attract or retain qualified employees in the future due to the intense competition for qualified personnel among biotechnology and other technology-based businesses, particularly in the advanced biofuels area, or due to the limited availability of personnel with the qualifications or experience necessary for our renewable chemicals and advanced biofuels business. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience staffing constraints that will adversely affect our ability to meet the demands of our partners and customers in a timely fashion or to support our internal research and development programs. In particular, our product and process development programs are dependent on our ability to attract and retain highly skilled scientists. Competition for experienced scientists and other technical personnel from numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms. Additionally, certain changes in our management could trigger an event of default under the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, and we could be forced to pay the outstanding balance of the loan(s) in full. All of our employees are at-will employees, meaning that either the employee or we may terminate their employment at any time.

Our planned activities will require additional expertise in specific industries and areas applicable to the products and processes developed through our technology platform or acquired through strategic or other transactions, especially in the end markets that we seek to penetrate. These activities will require the addition of new personnel, and the development of additional expertise by existing personnel. The inability to attract personnel with appropriate skills or to develop the necessary expertise could impair our ability to grow our business.

Our ability to compete may be adversely affected if we do not adequately protect our proprietary technologies or if we lose some of our intellectual property rights through costly litigation or administrative proceedings.

Our success will depend in part on our ability to obtain patents and maintain adequate protection of our intellectual property covering our technologies and products and potential products in the U.S. and other countries. We have adopted a strategy of seeking patent protection in the U.S. and in certain foreign countries with respect to certain of the technologies used in or relating to our products and processes. As such, as of December 31, 2013, we exclusively licensed rights to 94 issued patents and filed patent applications in the U.S. and in various foreign jurisdictions, and we owned rights to approximately 393 issued patents and filed patent applications in the U.S. and in various foreign jurisdictions. When and if issued, patents would expire at the end of their term and any patent would only provide us commercial advantage for a limited period of time, if at all. Our patent applications are directed to our enabling technologies and to our methods and products which support our business in the advanced biofuels and renewable chemicals markets. We intend to continue to apply for patents relating to our technologies, methods and products as we deem appropriate.

Only 27 of the patent applications that we have filed in the U.S. or in any foreign jurisdictions, and only certain of the patent applications filed by third parties in which we own rights, have been issued. A filed patent application does not guarantee a patent will issue and a patent issuing does not guarantee its validity, nor does it give us the right to practice the patented technology or commercialize the patented product. Third parties may have or obtain rights to “blocking patents” that could be used to prevent us from commercializing our products or practicing our technology. The scope and validity of patents and success in prosecuting patent

applications involve complex legal and factual questions and, therefore, issuance, coverage and validity cannot be predicted with any certainty. Patents issuing from our filed applications may be challenged, invalidated or circumvented. Moreover, third parties could practice our inventions in secret and in territories where we do not have patent protection. Such third parties may then try to sell or import products made using our inventions in and into the U.S. or other territories and we may be unable to prove that such products were made using our inventions. Additional uncertainty may result from implementation of the Leahy-Smith America Invents Act, enacted in September 2011, as well as other potential patent reform legislation passed by the U.S. Congress and from legal precedent as handed down by the U.S. Court of Appeals for the Federal Circuit and the U.S. Supreme Court, as they determine legal issues concerning the scope, validity and construction of patent claims. Because patent applications in the U.S. and many foreign jurisdictions are typically not published until 18 months after filing, or in some cases not at all, and because publication of discoveries in the scientific literature often lags behind the actual discoveries, there is additional uncertainty as to the validity of any patents that may issue and the potential for "blocking patents" coming into force at some future date. Accordingly, we cannot ensure that any of our currently filed or future patent applications will result in issued patents, or even if issued, predict the scope of the claims that may issue in our and other companies' patents. Given that the degree of future protection for our proprietary rights is uncertain, we cannot ensure that (i) we were the first to make the inventions covered by each of our filed applications, (ii) we were the first to file patent applications for these inventions, (iii) the proprietary technologies we develop will be patentable, (iv) any patents issued will be broad enough in scope to provide commercial advantage and prevent circumvention, and (v) competitors and other parties do not have or will not obtain patent protection that will block our development and commercialization activities.

These concerns apply equally to patents we have licensed, which may likewise be challenged, invalidated or circumvented, and the licensed technologies may be obstructed from commercialization by competitors' "blocking patents." In addition, we generally do not control the patent prosecution and maintenance of subject matter that we license from others. Generally, the licensors are primarily or wholly responsible for the patent prosecution and maintenance activities pertaining to the patent applications and patents we license, while we may only be afforded opportunities to comment on such activities. Accordingly, we are unable to exercise the same degree of control over licensed intellectual property as we exercise over our own intellectual property and we face the risk that our licensors will not prosecute or maintain it as effectively as we would like.

In addition, unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. Monitoring unauthorized use of our intellectual property is difficult, particularly where, as here, the end products reaching the market generally do not reveal the processes used in their manufacture, and particularly in certain foreign countries where the local laws may not protect our proprietary rights as fully as in the U.S., so we cannot be certain that the steps we have taken in obtaining intellectual property and other proprietary rights will prevent unauthorized use of our technology. If competitors are able to use our technology without our authorization, our ability to compete effectively could be adversely affected. Moreover, competitors and other parties such as universities may independently develop and obtain patents for technologies that are similar to or superior to our technologies. If that happens, the potential competitive advantages provided by our intellectual property may be adversely affected. We may then need to license these competing technologies, and we may not be able to obtain licenses on reasonable terms, if at all, which could cause material harm to our business. Accordingly, litigation may be necessary for us to assert claims of infringement, enforce patents we own or license, protect trade secrets or determine the enforceability, scope and validity of the intellectual property rights of others.

Our commercial success also depends in part on not infringing patents and proprietary rights of third parties, and not breaching any licenses or other agreements that we have entered into with regard to our technologies, products and business. We cannot be certain that patents have not or will not issue to third parties that could block our ability to obtain patents or to operate our business as we would like, or at all. There may be patents in some countries that, if valid, may block our ability to commercialize products in those countries if we are unsuccessful in circumventing or

acquiring rights to these patents. There may also be claims in patent applications filed in some countries that, if granted and valid, may also block our ability to commercialize products or processes in these countries if we are unable to circumvent or license them.

As is commonplace in the biotechnology industries, some of our directors, employees and consultants are or have been employed at, or associated with, companies and universities that compete with us or have or will develop similar technologies and related intellectual property. While employed at these companies, these employees, directors and consultants may have been exposed to or involved in research and technology similar to the areas of research and technology in which we are engaged. Though we have not received such a complaint, we may be subject to allegations that we, our directors, employees or consultants have inadvertently or otherwise used, misappropriated or disclosed alleged trade secrets or confidential or proprietary information of those companies. Litigation may be necessary to defend against such allegations and the outcome of any such litigation would be uncertain.

Under some of our research agreements, our partners share joint rights in certain intellectual property we develop. For example, under our development agreement with ICM, we have exclusive rights to all intellectual property developed within the defined scope of the project, but all other intellectual property developed pursuant to the agreement is to be jointly owned. Such provisions may limit our ability to gain commercial benefit from some of the intellectual property we develop, and may lead to costly or time-consuming disputes with parties with whom we have commercial relationships over rights to certain innovations.

If any other party has filed patent applications or obtained patents that claim inventions also claimed by us, we may have to participate in interference, derivation or other proceedings declared by the USPTO to determine priority of invention and, thus, the right to the patents for these inventions in the U.S. These proceedings could result in substantial cost to us even if the outcome is favorable. Even if successful, such a proceeding may result in the loss of certain claims. Even successful outcomes of such proceedings could result in significant legal fees and other expenses, diversion of management time and efforts and disruption in our business. Uncertainties resulting from initiation and continuation of any patent or related litigation could harm our ability to compete.

If our biocatalysts, or the genes that code for our biocatalysts, are stolen, misappropriated or reverse engineered, others could use these biocatalysts or genes to produce competing products.

Third parties, including our contract manufacturers, customers and those involved in shipping our biocatalysts, may have custody or control of our biocatalysts. If our biocatalysts, or the genes that code for our biocatalysts, were stolen, misappropriated or reverse engineered, they could be used by other parties who may be able to reproduce these biocatalysts for their own commercial gain. If this were to occur, it would be difficult for us to discover or challenge this type of use, especially in countries with limited intellectual property protection.

We may not be able to enforce our intellectual property rights throughout the world.

The laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the U.S. Many companies have encountered significant problems in protecting and enforcing intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to bioindustrial technologies. This could make it difficult for us to stop the infringement of our patents or misappropriation of our other intellectual property rights. Proceedings to enforce our patents and other proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Accordingly, our efforts to enforce our intellectual property rights in such countries may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop.

Confidentiality agreements with employees and others may not adequately prevent disclosures of trade secrets and other proprietary information.

We rely in part on trade secret protection to protect our confidential and proprietary information and processes. However, trade secrets are difficult to protect. We have taken measures to protect our trade secrets and proprietary information, but these measures may not be effective. We require new employees and consultants to execute confidentiality agreements upon the commencement of an employment or consulting arrangement with us. These agreements generally require that all confidential information developed by the individual or made known to the individual by us during the course of the individual’s relationship with us be kept confidential and not disclosed to third parties. These agreements also generally provide that know-how and inventions conceived by the individual in the course of rendering services to us shall be our exclusive property. Nevertheless, these agreements may not be enforceable, our proprietary information may be disclosed, third parties could reverse engineer our biocatalysts and others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position. In addition, an unauthorized breach in our information technology systems may expose our trade secrets and other proprietary information to unauthorized parties.

We have received funding from U.S. government agencies, which could negatively affect our intellectual property rights.

Some of our research has been funded by grants from U.S. government agencies. When new technologies are developed with U.S. government funding, the government obtains certain rights in any resulting patents and technical data, generally including, at a minimum, a nonexclusive license authorizing the government to use the invention or technical data for noncommercial purposes. U.S. government funding must be disclosed in any resulting patent applications, and our rights in such inventions will normally be subject to government license rights, periodic progress reporting, foreign manufacturing restrictions and march-in rights. March-in rights refer to the right of the U.S. government, under certain limited circumstances, to require us to grant a license to technology developed under a government grant to a responsible applicant or, if we refuse, to grant such a license itself. March-in rights can be triggered if the government determines that we have failed to work sufficiently towards achieving practical application of a technology or if action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to U.S. industry. If we breach the terms of our grants, the government may gain rights to the intellectual property developed in our related research. The government’s rights in our intellectual property may lessen its commercial value, which could adversely affect our performance.

Our government grants are subject to uncertainty, which could harm our business and results of operations.

We have received various government grants, including a cooperative agreement, to complement and enhance our own resources. We may seek to obtain government grants and subsidies in the future to offset all or a portion of the costs of Retrofitting existing ethanol manufacturing facilities and the costs of our research and development activities. We cannot be certain that we will be able to secure any such government grants or subsidies. Any of our existing grants or new grants that we may obtain may be terminated, modified or recovered by the granting governmental body under certain conditions.

We may also be subject to audits by government agencies as part of routine audits of our activities funded by our government grants. As part of an audit, these agencies may review our performance, cost structures and compliance with applicable laws, regulations and standards. Funds available under grants must be applied by us toward the research and development programs specified by the granting agencies, rather than for all of our programs generally. If any of our costs are found to be allocated improperly, the costs may not be reimbursed and any costs already reimbursed may have to be refunded. Accordingly, an audit could result in an adjustment to our revenues and results of operations.

We may face substantial competition, which could adversely affect our performance and growth.

We may face substantial competition in the markets for isobutanol, polyester, rubber, plastics, fibers, other polymers and hydrocarbon fuels. Our competitors include companies in the incumbent petroleum-based industry as well as those in the nascent biorenewable industry. The incumbent petroleum-based industry benefits from a large established infrastructure, production capability and business relationships. The incumbents' greater resources and financial strength provide significant competitive advantages that we may not be able to overcome in a timely manner. Academic and government institutions may also develop technologies which will compete with us in the chemicals, solvents and blendstock markets.

The biorenewable industry is characterized by rapid technological change. Our future success will depend on our ability to maintain a competitive position with respect to technological advances. Technological development by others may impact the competitiveness of our products in the marketplace. Competitors and potential competitors who have greater resources and experience than we do may develop products and technologies that make ours obsolete or may use their greater resources to gain market share at our expense.

In the production of isobutanol, we face competition from Butamax. Additionally, a number of companies including Cathay Industrial Biotech, Ltd., Green Biologics Ltd., METabolic Explorer, S.A., Eastman Chemical Company (which acquired TetraVitae Bioscience, Inc. in November 2011) and Cobalt Technologies, Inc. are developing n-butanol production capability from a variety of renewable feedstocks.

In the polyester, rubber, plastics, fibers and other polymers markets, we face competition from incumbent petroleum-derived products, other renewable isobutanol producers and renewable n-butanol producers. Our competitive position versus the incumbent petroleum-derived products and other renewable butanol producers may not be favorable. Petroleum-derived products have dominated the market for many years and there is substantial existing infrastructure for production from petroleum sources, which may impede our ability to establish a position in these markets. Other isobutanol and n-butanol companies may develop technologies that prove more effective than our isobutanol production technology, or such companies may be more adept at marketing their production. Additionally, one small company in France, Global Bioenergies, S.A., is pursuing the production of isobutylene from renewable carbohydrates directly. Since conversion of isobutanol to butenes such as isobutylene is a key step in producing many polyester, rubber, plastics, fibers and other polymers from our isobutanol, this direct production of renewable isobutylene, if successful, could limit our opportunities in these markets.

In the gasoline blendstock market, we will compete with renewable ethanol producers (including those working to produce ethanol from cellulosic feedstocks), producers of alkylate from petroleum and producers of other blendstocks, all of whom may reduce our ability to obtain market share or maintain our price levels. For example, Coskata, Inc. is developing a hybrid thermochemical-biocatalytic process to produce ethanol from a variety of feedstocks. If any of these competitors succeed in producing blendstocks more efficiently, in higher volumes or offering superior performance than our isobutanol, our financial performance may suffer. Furthermore, if our competitors have more success marketing their products or reach development or supply agreements with major customers, our competitive position may also be harmed.

In the production of other biofuels, key competitors include Shell Oil Company, BP, DuPont-Danisco Cellulosic Ethanol LLC, Abengoa Bioenergy, S.A., POET, LLC, ICM, Mascoma Corporation, Inbicon A/S, INEOS New Planet BioEnergy LLC, Coskata, Inc., Archer Daniels Midland Company, BlueFire Ethanol, Inc., KL Energy Corporation, ZeaChem Inc., Iogen Corporation, Qteros, Inc., AE Biofuels, Inc. and many smaller startup companies. If these companies are successful in establishing low cost cellulosic ethanol or other fuel production, it could negatively impact the market for our isobutanol as a gasoline blendstock.

In the markets for the hydrocarbon fuels that we plan to produce from our isobutanol, we will face competition from the incumbent petroleum-based fuels industry. The incumbent petroleum-based fuels industry makes the vast majority of the world's gasoline, jet and diesel fuels and blendstocks. It is a mature industry with a substantial base of infrastructure for the production and distribution of petroleum-derived products. The size, established infrastructure and significant resources of many companies in this industry may put us at a substantial competitive disadvantage and delay or prevent the establishment and growth of our business in the market for hydrocarbon fuels.

Biofuels companies may also provide substantial competition in the hydrocarbon fuels market. With respect to production of renewable gasoline, biofuels competitors are numerous and include both large established companies and numerous startups. For example, Virent Energy Systems, Inc. has developed a process for making gasoline and gasoline blendstocks and Kior, Inc. has developed a technology platform to convert biomass into renewable crude oil. Many other competitors may do so as well. In the jet fuel market, we will face competition from companies such as Synthetic Genomics, Inc., Solazyme, Inc., Sapphire Energy, Inc. and Exxon-Mobil Corporation that are pursuing production of jet fuel from algae-based technology. Renewable Energy Group, Inc. and others are also targeting production of jet fuels from renewable biomass. We may also face competition from companies working to produce jet fuel from hydrogenated fatty acid methyl esters. In the diesel fuels market, competitors such as Amyris Biotechnologies, Inc. and Renewable Energy Group, Inc. have developed technologies for production of alternative hydrocarbon diesel fuel.

In the polyester, rubber, plastics, fibers and other polymers markets and the hydrocarbon fuels market, we expect to face vigorous competition from existing technologies. The companies we may compete with may have significantly greater access to resources, far more industry experience and/or more established sales and marketing networks. Additionally, since we do not plan to produce most of these products directly, we depend on the willingness of potential customers to purchase and convert our isobutanol into their products. These potential customers generally have well-developed manufacturing processes and arrangements with suppliers of the chemical components of their products and may have a resistance to changing these processes and components. These potential customers frequently impose lengthy and complex product qualification procedures on their suppliers, influenced by consumer preference, manufacturing considerations such as process changes and capital and other costs associated with transitioning to alternative components, supplier operating history, regulatory issues, product liability and other factors, many of which are unknown to, or not well understood by, us. Satisfying these processes may take many months or years. If we are unable to convince these potential customers that our isobutanol is comparable or superior to the alternatives that they currently use, we will not be successful in entering these markets and our business will be adversely affected.

We also face challenges in marketing our isobutanol. Though we intend to enhance our competitiveness through partnerships and joint development agreements, some competitors may gain an advantage by securing more valuable partnerships for developing their hydrocarbon products than we are able to obtain. Such partners could include major petrochemical, refiner or end-user companies. Additionally, petrochemical companies may develop alternative pathways for hydrocarbon production that may be less expensive, and may utilize more readily available infrastructure than that used to convert our isobutanol into hydrocarbon products.

We plan to enter into partnerships through which we will sell significant volumes of our isobutanol to partners who will convert it into useful hydrocarbons or use it as a fuel or as a gasoline blendstock. However, if any of these partners instead negotiate supply agreements with other buyers for the isobutanol they purchase from us, or sell it into the open market, they may become competitors of ours in the field of isobutanol sales. This could significantly reduce our profitability and hinder our ability to negotiate future supply agreements for our isobutanol, which could have an adverse effect on our performance.

Our ability to compete successfully will depend on our ability to develop proprietary products that reach the market in a timely manner and are technologically superior to and/or are less expensive than other products on the market. Many of our competitors have substantially greater production, financial, research and development, personnel and marketing resources than we do. In addition, certain of our competitors may also benefit from local government subsidies and other incentives that are not available to us. As a result, our competitors may be able to develop competing and/or superior technologies and processes, and compete more aggressively and sustain that competition over a longer period of time than we could. Our technologies and products may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors. As more companies develop new intellectual property in our markets, the possibility of a competitor acquiring patent or other rights that may limit our products or potential products increases, which could lead to litigation. Furthermore, to secure purchase agreements from certain customers, we may be required to enter into exclusive supply contracts, which could limit our ability to further expand our sales to new customers. Likewise, major potential customers may be locked into long-term, exclusive agreements with our competitors, which could inhibit our ability to compete for their business.

In addition, various governments have recently announced a number of spending programs focused on the development of clean technologies, including alternatives to petroleum-based fuels and the reduction of carbon emissions. Such spending programs could lead to increased funding for our competitors or a rapid increase in the number of competitors within those markets.

Our limited resources relative to many of our competitors may cause us to fail to anticipate or respond adequately to new developments and other competitive pressures. This failure could reduce our competitiveness and market share, adversely affect our results of operations and financial position and prevent us from obtaining or maintaining profitability.

The terms of the agreements governing our indebtedness, including our secured indebtedness with TriplePoint and the Indenture governing the Convertible Notes, may restrict our ability to engage in certain transactions and settlement of the Convertible Notes through early conversion could result in further dilution to our existing stockholders.

In August 2010, our wholly owned subsidiary, Gevo Development, borrowed $12.5 million to finance its acquisition of Agri-Energy pursuant to the Original Agri-Energy Loan Agreement with TriplePoint, and immediately following such acquisition Agri-Energy assumed such obligations as borrower. In October 2011, the Original Agri-Energy Loan Agreement was amended and restated to provide Agri-Energy with additional term loan facilities of up to $15.0 million to pay a portion of the costs, expenses, and other amounts associated with the Retrofit of the Agri-Energy Facility to produce isobutanol. In October 2011, Agri-Energy borrowed $10.0 million under the additional term loan facilities. On January 6, 2012, Agri-Energy borrowed an additional $5.0 million under the additional term loan facilities, bringing the total borrowed under the additional term loan facilities at December 31, 2013 to $15.0 million. Concurrently with the execution of the Amended Agri-Energy Loan Agreement, Gevo, Inc. entered into the Gevo Security Agreement with TriplePoint, which secured its guarantee of Agri-Energy's obligations under the Amended Agri-Energy Loan Agreement. The terms of the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, may prohibit us from engaging in certain actions, including disposing of certain assets, granting or otherwise allowing the imposition of a lien against certain assets, incurring certain kinds of additional indebtedness or acquiring or merging with other entities unless we receive the prior approval of the applicable lender. If the lender does not consent to any of the actions that we desire to take, we could be prohibited from engaging in transactions which could be beneficial to our business and our stockholders or could be forced to pay the outstanding balance of the loan in full.

In June 2012, Gevo, Inc. entered into the Security Agreement Amendment to the Gevo Security Agreement and an amendment to the Gevo Loan Agreement which, among other things: (i) added as an event of default the payment, repurchase or redemption of the Convertible Notes or of amounts payable in connection therewith other than certain permitted payments related to the Convertible Notes, including regularly scheduled interest payments, (ii) added a negative covenant whereby we could not incur any indebtedness other than as permitted under the Security Agreement Amendment; and (iii) added a prohibition on making any Coupon Make-Whole Payments upon conversion of the Convertible Notes in cash prior to the payment of all remaining outstanding obligations in full under the Amended Agri-Energy Loan Agreement. In December 2013, in connection with our offering of common stock units we further amended our arrangement with TriplePoint to, among other things: (i) grant TriplePoint a lien and security interest in all of the intellectual property of the Company; and (ii) expand the events of default to add as an event of default the repurchase of the warrants. If we take any of the actions prohibited by the amendments, we could be forced to pay the outstanding balance of the loan in full. As of December 31, 2013, the aggregate outstanding principal and final payments under the Amended Agri-Energy Loan Agreement was approximately $11.1 million.

If holders of the Convertible Notes elect to convert some or all of their Convertible Notes prior to July 1, 2017, our satisfaction of the Coupon Make-Whole Payments due to such note holders may cause dilution to our existing stockholders because certain limitations in the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, may require us to make such payments in shares of common stock rather than cash. As of December 31, 2013, we have issued 2,957,775 shares of our common stock in satisfaction of Coupon Make-Whole Payments due in connection with the conversion of the Convertible Notes.

If a Fundamental Change occurs prior to the maturity date of the Convertible Notes, holders of the Convertible Notes will have the right, at their option, to require us to repurchase all or a portion of their Convertible Notes. In addition, if a Fundamental Change occurs prior to the maturity date of the Convertible Notes, we will in some cases be required to increase the conversion rate for a holder that elects to convert its Convertible Notes in connection with such Fundamental Change. In addition, the Indenture prohibits us from engaging in certain mergers or acquisitions unless, among other things, the surviving entity assumes our obligations under the Convertible Notes. If an extraordinary transaction occurs, holders of warrants will have the right, at their option, to require us to repurchase the unexercised portion of such warrants for an amount in cash equal to the value of the warrants, as determined in accordance with the Black Scholes option pricing model and the terms of the warrants. These and other provisions could prevent or deter a third party from acquiring us, even where the acquisition could be beneficial to you.

Business interruptions could delay us in the process of developing our products and could disrupt our sales.

We are vulnerable to natural disasters and other events that could disrupt our operations, such as riots, civil disturbances, war, terrorist acts, floods, infections in our laboratory or production facilities or those of our contract manufacturers and other events beyond our control. We do not have a detailed disaster recovery plan. In addition, we may not carry sufficient business interruption insurance to compensate us for losses that may occur. Any losses or damages we incur could have a material adverse effect on our cash flows and success as an overall business. Furthermore, ICM may terminate our commercialization agreement if a force majeure event interrupts our operations for a specified period of time.

We engage in hedging transactions, which could harm our business.

We have engaged in hedging transactions to offset some of the effects of volatility in commodity prices. We generally follow a policy of using exchange-traded futures contracts to reduce our net position in agricultural commodity inventories and forward purchase contracts to manage price risk. Hedging activities may cause us to suffer losses, such as if we purchase a position in a declining market or sell a position in a rising market. Furthermore, hedging exposes us to the risk that we may have under- or over-estimated our need for a specific commodity or that the other party to a hedging contract may default on its obligation. If there are significant swings in commodity prices, or if we purchase more corn for future delivery than we can process, we may have to pay to terminate a futures contract, resell unneeded corn inventory at a loss, or produce our products at a loss, all of which would have a material adverse effect on our financial performance. We may vary the hedging strategies we undertake, which could leave us more vulnerable to increases in commodity prices or decreases in the prices of isobutanol, distiller's grains, iDGs™ or ethanol. Losses from hedging activities and changes in hedging strategy could have a material adverse effect on our operations.

Ethical, legal and social concerns about genetically engineered products and processes, and similar concerns about feedstocks grown on land that could be used for food production, could limit or prevent the use of our products, processes and technologies and limit our revenues.

Some of our processes involve the use of genetically engineered organisms or genetic engineering technologies. Additionally, our feedstocks may be grown on land that could be used for food production, which subjects our feedstock sources to "food versus fuel" concerns. If we are not able to overcome the ethical, legal and social concerns relating to genetic engineering or food versus fuel, our products and processes may not be accepted. Any of the risks discussed below could result in increased expenses, delays or other impediments to our programs or the public acceptance and commercialization of products and processes dependent on our technologies or inventions.

Our ability to develop and commercialize one or more of our technologies, products, or processes could be limited by the following factors:

- public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and genetically engineered products and processes, which could influence public acceptance of our technologies, products and processes;
- public attitudes regarding and potential changes to laws governing ownership of genetic material, which could harm our intellectual property rights with respect to our genetic material and discourage others from supporting, developing or commercializing our products, processes and technologies;
- public attitudes and ethical concerns surrounding production of feedstocks on land which could be used to grow food, which could influence public acceptance of our technologies, products and processes;
- governmental reaction to negative publicity concerning genetically engineered organisms, which could result in greater government regulation of genetic research and derivative products; and

governmental reaction to negative publicity concerning feedstocks produced on land which could be used to grow food, which could result in greater government regulation of feedstock sources.

The subjects of genetically engineered organisms and food versus fuel have received negative publicity, which has aroused public debate. This adverse publicity could lead to greater regulation and trade restrictions on imports of genetically engineered products or feedstocks grown on land suitable for food production.

The biocatalysts that we develop have significantly enhanced characteristics compared to those found in naturally occurring enzymes or microbes. While we produce our biocatalysts only for use in a controlled industrial environment, the release of such biocatalysts into uncontrolled environments could have unintended consequences. Any adverse effect resulting from such a release could have a material adverse effect on our business and financial condition, and we may be exposed to liability for any resulting harm.

Compliance with stringent laws and regulations may be time consuming and costly, which could adversely affect the commercialization of our biofuels products and related co-products.

Any biofuels developed using our technologies will need to meet a significant number of regulations and standards, including regulations imposed by the U.S. Department of Transportation, the EPA, the FDA, the FAA, various state agencies and others. Any failure to comply, or delays in compliance, with the various existing and evolving industry regulations and standards could prevent or delay the commercialization of any biofuels developed using our technologies and subject us to fines and other penalties.

We use hazardous materials in our business and we must comply with environmental laws and regulations. Any claims relating to improper handling, storage or disposal of these materials or noncompliance with applicable laws and regulations could be time consuming and costly and could adversely affect our business and results of operations.

Our research and development processes involve the use of hazardous materials, including chemical, radioactive and biological materials. Our operations also produce hazardous waste. We cannot eliminate entirely the risk of accidental contamination or discharge and any resultant injury from these materials. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of, and human exposure to, these materials. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials, and our liability may exceed our total assets. Although we believe that our activities conform in all material respects with environmental laws, there can be no assurance that violations of environmental, health and safety laws will not occur in the future as a result of human error, accident, equipment failure or other causes. Compliance with applicable environmental laws and regulations may be expensive, and the failure to comply with past, present, or future laws could result in the imposition of fines, third-party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production or a cessation of operations, and our liability may exceed our total assets. Liability under environmental laws can be joint and several and without regard to comparative fault. Environmental laws could become more stringent over time imposing greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business.

As isobutanol has not previously been used as a commercial fuel in significant amounts, its use subjects us to product liability risks, and we may have difficulties obtaining product liability insurance.

Isobutanol has not previously been used as a commercial fuel and research regarding its impact on engines and distribution infrastructure is ongoing. Though we intend to test our isobutanol further before its commercialization, there is a risk that it may damage engines or otherwise fail to perform as expected. If isobutanol degrades the performance or reduces the lifecycle of engines, or causes them to fail to meet emissions standards, market acceptance could be slowed or stopped, and we could be subject to product liability claims. Furthermore, due to isobutanol’s lack of commercial history as a fuel, we are uncertain as to whether we will be able to acquire product liability insurance on reasonable terms, or at all. A significant product liability lawsuit could substantially impair our production efforts and could have a material adverse effect on our business, reputation, financial condition and results of operations.

During the ordinary course of business, we may become subject to lawsuits or indemnity claims, which could materially and adversely affect our business and results of operations.

From time to time, we may in the ordinary course of business be named as a defendant in lawsuits, claims and other legal proceedings. These actions may seek, among other things, compensation for alleged personal injury, worker’s compensation, employment discrimination, breach of contract, property damages, civil penalties and other losses of injunctive or declaratory relief. In the event that such actions or indemnities are ultimately resolved unfavorably at amounts exceeding our accrued liability, or at material amounts, the outcome could materially and adversely affect

our reputation, business and results of operations. In addition, payments of significant amounts, even if reserved, could adversely affect our liquidity position.

We may not be able to use some or all of our net operating loss carry-forwards to offset future income.

We have net operating loss carryforwards due to prior period losses, which if not utilized will begin to expire at various times over the next 20 years. If we are unable to generate sufficient taxable income to utilize our net operating loss carryforwards, these carryforwards could expire unused and be unavailable to offset future income tax liabilities.

In addition, under Section 382 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an "ownership change" (generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period) is subject to limitation on its ability to utilize its pre-change net operating loss carry-forwards, or net operating losses, to offset future taxable income. We may have experienced one or more ownership changes in prior years, and the issuance of shares in connection with our initial public offering may itself have triggered an ownership change. In addition, future changes in our stock ownership, which may be outside of our control, may trigger an ownership change, as may future equity offerings or acquisitions that have equity as a component of the purchase price. If an ownership change has occurred or does occur in the future, our ability to utilize our net operating losses to offset income if we attain profitability may be limited.

Enacted and proposed changes in securities laws and regulations have increased our costs and may continue to increase our costs in the future.

In recent years, there have been several changes in laws, rules, regulations and standards relating to corporate governance and public disclosure, including the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), the Sarbanes-Oxley Act of 2002 and various other new regulations promulgated by the SEC and rules promulgated by the national securities exchanges.

The Dodd-Frank Act, enacted in July 2010, expands federal regulation of corporate governance matters and imposes requirements on publicly-held companies, including us, to, among other things, provide stockholders with a periodic advisory vote on executive compensation and also requires compensation committee reforms and enhanced pay-for-performance disclosures. While some provisions of the Dodd-Frank Act are effective upon enactment, others will be implemented upon the SEC's adoption of related rules and regulations. The scope and timing of the adoption of such rules and regulations is uncertain and accordingly, the cost of compliance with the Dodd-Frank Act is also uncertain.

These and other new or changed laws, rules, regulations and standards are, or will be, subject to varying interpretations in many cases due to their lack of specificity. As a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies, which could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. Our efforts to comply with evolving laws, regulations and standards are likely to continue to result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. Further, compliance with new and existing laws, rules, regulations and standards may make it more difficult and expensive for us to maintain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. Members of our board of directors and our principal executive officer and principal financial officer could face an increased risk of personal liability in connection with the performance of their duties. As a result, we may have difficulty attracting and retaining qualified directors and executive officers, which could harm our business. We continually evaluate and monitor regulatory developments and cannot estimate the timing or magnitude of additional costs we may incur as a result of such developments.

If we fail to maintain an effective system of internal controls, we might not be able to report our financial results accurately or prevent fraud; in that case, our stockholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our stock.

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. In addition, Section 404 of the Sarbanes-Oxley Act of 2002 ("Section 404") requires us to evaluate and report on our internal control over financial reporting and have our principal executive officer and principal financial officer certify as to the accuracy and completeness of our financial reports. The process of maintaining our internal controls and complying with Section 404 is expensive and time consuming, and requires significant attention of management. We cannot be certain that these measures will ensure that we maintain adequate controls over our financial processes and reporting in the future. Even if we conclude that our internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, because of their inherent limitations, our internal controls over financial reporting may not prevent or detect fraud or misstatements. Failure to maintain required controls or implement new or additional controls as circumstances warrant, or difficulties encountered in maintaining or implementing controls, could harm our results of operations or cause us to fail to meet our reporting obligations.

Our management has concluded that there are no material weaknesses in our internal controls over financial reporting as of December 31, 2013. However, there can be no assurance that our controls over financial processes and reporting will be effective in the future or that additional material weaknesses or significant deficiencies in our internal controls will not be discovered in the future. If we, or our independent registered public accounting firm, discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in our financial statements and harm our stock price. In addition, a delay in compliance with Section 404 could subject us to a variety of administrative sanctions, including SEC action, ineligibility for short form resale registration, the suspension or delisting of our common stock from the stock exchange on which it is listed and the inability of registered broker-dealers to make a market in our common stock, which would further reduce our stock price and could harm our business.

Certain Risks Related to Owning our Securities

We may incur additional indebtedness in the future. Any future indebtedness we incur exposes us to risks that could adversely affect our business, financial condition and results of operations.

As of December 31, 2013, the aggregate amount of the outstanding principal and final payments under the Amended Agri-Energy Loan Agreement was approximately $11.1 million. In addition, we incurred $45.0 million of senior indebtedness when we sold the Convertible Notes in July 2012, of which $26.9 million is outstanding as of December 31, 2013. Our indebtedness could have significant negative consequences for our business, results of operations and financial condition, including:

increasing our vulnerability to adverse economic and industry conditions;
limiting our ability to obtain additional financing;
requiring the dedication of a substantial portion of our cash flow from operations to service our indebtedness, thereby reducing the amount of our cash flow available for other purposes;
limiting our flexibility in planning for, or reacting to, changes in our business; and
placing us at a possible competitive disadvantage with less leveraged competitors and competitors that may have better access to capital resources.

We cannot assure you that we will continue to maintain sufficient cash reserves or that our business will generate cash flow from operations at levels sufficient to permit us to pay principal, premium, if any, and interest on our indebtedness, or that our cash needs will not increase. If we are unable to generate sufficient cash flow or otherwise obtain funds necessary to make required payments, or if we fail to comply with the various requirements of our existing indebtedness or any other indebtedness which we may incur in the future, we would be in default, which would permit the holders of the Convertible Notes and such other indebtedness to accelerate the maturity of the Convertible Notes and such other indebtedness and could cause defaults under the Convertible Notes and such other indebtedness. Any default under the Convertible Notes or such other indebtedness could have a material adverse effect on our business, results of operations and financial condition.

We and our subsidiaries may incur substantially more debt or take other actions which would intensify the risks discussed above.

We and any current and future subsidiaries of ours may incur substantial additional debt in the future, subject to the specified limitations in our existing financing documents and the Indenture. Under the terms of the Indenture, we will not be restricted from incurring additional debt, securing future debt, recapitalizing our debt or taking a number of other actions that could have the effect of diminishing our ability to make payments on the Convertible Notes when due. Such actions may, however, be limited by the terms of the agreements governing our indebtedness, including our secured indebtedness with TriplePoint. If new debt is added to our or any of our subsidiaries' debt levels, the risks described in this "Certain Risks Related to Owning Our Securities" section could intensify.

Our stock price may be volatile, and your investment in our securities could suffer a decline in value.

The market price of shares of our common stock has experienced significant price and volume fluctuations. For example, since February 19, 2011, when we became a public company, the closing sales price for one share of our common stock has reached a high of $26.36 and a low of $1.12.

We cannot predict whether the price of our common stock will rise or fall. A variety of factors may have a significant effect on our stock price, including:

actual or anticipated fluctuations in our financial condition and operating results;

the position of our cash and cash equivalents;

actual or anticipated changes in our growth rate relative to our competitors;

actual or anticipated fluctuations in our competitors' operating results or changes in their growth rate;

announcements of technological innovations by us, our partners or our competitors;

announcements by us, our partners or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

the entry into, modification or termination of licensing arrangements, marketing arrangements, and/or research, development, commercialization, supply, off-take or distribution arrangements;

our ability to consistently produce commercial quantities of isobutanol at the Agri-Energy Facility and ramp up production to nameplate capacity;

additions or losses of customers;
additions or departures of key management or scientific personnel;
competition from existing products or new products that may emerge;
issuance of new or updated research reports by securities or industry analysts;
fluctuations in the valuation of companies perceived by investors to be comparable to us;
litigation involving us, our general industry or both;
disputes or other developments related to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
changes in existing laws, regulations and policies applicable to our business and products, including the Renewable Fuel Standard ("RFS") program, and the adoption of or failure to adopt carbon emissions regulation;
announcements or expectations of additional financing efforts;
sales of our common stock or equity-linked securities, such as warrants, by us or our stockholders;
share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
general market conditions in our industry; and
general economic and market conditions, including the recent financial crisis.

Furthermore, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of shares of our common stock, regardless of our operating performance, and cause the value of your investment to decline. Because the Convertible Notes and the Warrants are convertible or exercisable into our common stock, volatility or a reduction in the market price of our common stock could have an adverse effect on their trading price. Holders who receive common stock upon conversion of the Convertible Notes or exercise of the Warrants will also be subject to the risk of volatility and a reduction in the market price of our common stock. In addition, the existence of the Convertible Notes and the Warrants may encourage short selling in our common stock by market participants because the conversion of the Convertible Notes or exercise of the Warrants could depress the price of our common stock.

Additionally, in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation or other derivative shareholder lawsuits. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business regardless of the outcome.

The price of our common stock could also be affected by possible sales of common stock by investors who view the Convertible Notes or Warrants as a more attractive means of equity participation in us and by hedging or arbitrage activity involving our common stock. The hedging or arbitrage could, in turn, affect the trading prices of the Convertible Notes and Warrants, or any common stock that holders receive upon conversion of the Convertible Notes or exercise of the Warrants.

Sales of a substantial number of shares of our common stock or securities linked to our common stock, such as the Convertible Notes and Warrants, in the public market could occur at any time. These sales, or the perception in the market that such sales may occur, could reduce the market price of our common stock.

Stockholders as of December 31, 2013 who own more than 5% of our outstanding common stock, which consists of two stockholders, collectively have ownership of approximately 20% of our outstanding common stock. If one or more of them were to sell a substantial portion of the shares they hold, it could cause our stock price to decline. Moreover, certain holders of our outstanding common stock (including shares of our common stock issuable upon the exercise of outstanding warrants) have rights, subject to some conditions, to require us to file registration statements covering their shares and to include their shares in registration statements that we may file for ourselves or other

stockholders.

We may not have the ability to pay interest on the Convertible Notes or to repurchase or redeem the Convertible Notes.

The Convertible Notes, which had a principal balance of $26.9 million at December 31, 2013, bear interest at a rate of 7.5% per year, payable in cash semi-annually in arrears on January 1 and July 1 of each year. If a Fundamental Change (as defined in the Indenture) occurs, holders of the Convertible Notes may require us to repurchase, for cash, all or a portion of their Convertible Notes. It would be a Fundamental Change under the Indenture if, among other things, our common stock is not listed on a national securities exchange. The failure by us to meet the minimum listing requirements for the exchange could result in our common stock being delisted from the exchange and trigger a Fundamental Change. In such circumstance we would be required to offer to repurchase the Convertible Notes at 100% plus accrued and unpaid interest, to, but not including, the repurchase date. If we elect to redeem the Convertible Notes prior to their maturity, the redemption price of any Convertible Notes redeemed by us will be paid for in cash. Our ability to pay the interest on the Convertible Notes, to repurchase or redeem the Convertible Notes, to refinance our indebtedness and to fund working capital needs and planned capital expenditures depends on our ability to generate cash flow in the future. To some extent, this is subject to general economic, financial, competitive, legislative and regulatory factors and other factors that are beyond our control. We cannot assure you that we will maintain sufficient cash reserves or that our business will generate cash flow from operations at levels sufficient to permit us to pay the interest on the Convertible Notes, to repurchase or redeem the Convertible Notes or to pay any cash amounts that may become due upon conversion of the Convertible Notes, or that our cash needs will not increase. In addition, any such repurchase or redemption of the Convertible Notes, even if such action would be in our best interests, may result in a default under the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, unless we are able to obtain the applicable lender’s consent prior to the taking of such action.

Our failure to repurchase tendered Convertible Notes at a time when the repurchase is required by the Indenture would constitute a default under the Convertible Notes and would permit holders of the Convertible Notes to accelerate our obligations under the Convertible Notes. Such default may also lead to a default under the agreements governing any of our current and future indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay such indebtedness and repurchase the Convertible Notes or make cash payments upon conversions thereof.

If we are unable to generate sufficient cash flow from operations in the future to service our indebtedness and meet our other needs, we may have to refinance all or a portion of our indebtedness, obtain additional funds through public or private debt or equity financings, reduce expenditures or sell assets that we deem necessary to our business. Our ability to take some or all of these actions will be subject to certain limitations in the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, and we cannot assure you that any of these measures would be possible or that any additional financing could be obtained on favorable terms, or at all. The inability to obtain additional financing on commercially reasonable terms could have a material adverse effect on our financial condition, which could cause the value of your investment to decline. Additionally, if we were to conduct a public or private offering of securities, any new offering would be likely to dilute our stockholders’ equity ownership.

We may not be permitted, by the agreements governing our secured indebtedness, to repurchase the Convertible Notes.

If a Fundamental Change occurs, the holders of the Convertible Notes may require us to repurchase all or a portion of their Convertible Notes for cash at a repurchase price equal to 100% of the principal amount of the Convertible Notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the repurchase date. However, the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, may prohibit us from paying, repurchasing or redeeming the Convertible Notes or any amounts payable in connection with a Fundamental Change. In the event that a Fundamental Change occurs at a time when we are prohibited from repurchasing the

Convertible Notes, we would need to seek the consent of one or more of our lenders to repurchase the Convertible Notes from the holders or we would otherwise be risking an event of default under the agreements governing our indebtedness, including our secured indebtedness with TriplePoint. If we were unable to obtain such consent, compliance with the terms of the Convertible Notes may trigger an event of default under such agreements.

Although the Convertible Notes are referred to as “senior notes,” the Convertible Notes are unsecured and are effectively subordinated to our secured indebtedness and effectively subordinated to all liabilities of our subsidiaries from time to time outstanding.

The Convertible Notes are obligations only of Gevo, Inc. and are not guaranteed by our subsidiaries or secured by any of our or their properties or assets. The Convertible Notes are effectively subordinated to all of our existing and future secured indebtedness and effectively subordinated to all existing and future liabilities of our subsidiaries, including trade payables. Our subsidiaries are separate legal entities and have no obligation to pay any amounts due pursuant to the Convertible Notes. Our subsidiaries conduct a significant amount of our business, and may incur significant liabilities in connection with such business. As of December 31, 2013, our subsidiaries had indebtedness and other obligations in the amount of approximately $15.5 million. These amounts of indebtedness structurally rank senior to the Convertible Notes.

In any liquidation, dissolution, bankruptcy or other similar proceeding, holders of our secured debt may assert rights against any assets securing such debt in order to receive full payment of the debt before those assets may be used to pay the holders of the Convertible Notes. In such an event, we may not have sufficient assets remaining to pay amounts due on any or all of the Convertible Notes. At December 31, 2013, on a consolidated basis, we had approximately $11.1 million in aggregate principal amount of secured indebtedness outstanding. In addition, the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, may prohibit us from making payments on the Convertible Notes that are not regularly scheduled payments.

We have made only limited covenants in the Indenture, and these limited covenants may not protect the value of an investment in the Convertible Notes.

The Indenture governing the Convertible Notes does not:

require us to maintain any financial ratios or specific levels of net worth, revenues, income, cash flows or liquidity and, accordingly, does not protect holders of the Convertible Notes in the event that we experience significant adverse changes in our financial condition or results of operations;
limit our subsidiaries' ability to incur indebtedness that would effectively rank senior to the Convertible Notes;
limit our ability to incur secured indebtedness that would effectively rank senior to the Convertible Notes or indebtedness that is equal in right of payment to the Convertible Notes;
restrict our subsidiaries' ability to issue securities that would be senior to the common stock of our subsidiaries held by us;
restrict our ability to repurchase our securities;
restrict our ability to pledge our assets or those of our subsidiaries; or
restrict our ability to make investments or to pay dividends or make other payments in respect of our common stock or other securities ranking junior to the Convertible Notes.

Furthermore, the Indenture contains only limited protections in the event of a change in control. We could engage in many types of transactions, such as acquisitions, refinancings or recapitalizations that could substantially affect our capital structure and the value of the Convertible Notes and our common stock but would not constitute a "Fundamental Change" that permits holders to require us to repurchase their Convertible Notes.

Holders of Convertible Notes are not entitled to any rights with respect to our common stock, but will be subject to all changes made with respect to such rights.

Holders of Convertible Notes are not entitled to any rights with respect to our common stock (including, without limitation, voting rights and rights to receive any dividends or other distributions on our common stock), but holders of Convertible Notes will be subject to all changes affecting our common stock. For example, if an amendment is proposed to our amended and restated certificate of incorporation or amended and restated bylaws requiring stockholder approval and the record date for determining the stockholders of record entitled to vote on the amendment occurs prior to a holder's conversion of its Convertible Notes, such holder will not be entitled to vote on the amendment, although such holder will nevertheless be subject to any changes affecting our common stock that result from such amendment.

The adjustment to the conversion rate for Convertible Notes converted in connection with a Make-Whole Fundamental Change may not adequately compensate holders of the Convertible Notes for the lost option value of the Convertible Notes as a result of such transaction.

If a Make-Whole Fundamental Change (as defined in the Indenture) occurs prior to maturity of the Convertible Notes, under certain circumstances, we will increase the conversion rate by a number of additional shares of our common stock for Convertible Notes converted in connection with such Make-Whole Fundamental Change. The increase in the

conversion rate will be determined based on the date on which the specified corporate transaction constituting the Make-Whole Fundamental Change becomes effective and the price paid (or deemed paid) per share of our common stock in such transaction. The adjustment to the conversion rate for Convertible Notes converted in connection with a Make-Whole Fundamental Change may not adequately compensate holders of the Convertible Notes for any lost value of the Convertible Notes as a result of such transaction. In addition, if the price of our common stock in the transaction is greater than $20.00 per share or less than $4.95 per share (in each case, subject to adjustment), no adjustment will be made to the conversion rate.

Our obligation to increase the conversion rate upon the occurrence of a Make-Whole Fundamental Change could be considered a penalty, in which case the enforceability thereof would be subject to general principles of reasonableness of economic remedies.

The conversion rate of the Convertible Notes may not be adjusted for all dilutive events.

The conversion rate of the Convertible Notes is subject to adjustment for certain events, including, but not limited to, the issuance of stock dividends on our common stock, the issuance of certain rights, options or warrants, distributions of capital stock, indebtedness, or assets, cash dividends and certain issuer tender or exchange offers. However, the conversion rate will not be adjusted for other events, such as a third-party tender or exchange offer or an issuance of common stock or securities convertible or exercisable into common stock, that may adversely affect the trading price of the Convertible Notes or the consideration issued upon conversion thereof. An event that adversely affects the value of the Convertible Notes may occur, and that event may not result in an adjustment to the conversion rate.

Some significant restructuring transactions may not constitute a Fundamental Change, in which case we would not be obligated to offer to repurchase the Convertible Notes.

Upon the occurrence of a Fundamental Change, holders have the right to require us to repurchase their Convertible Notes. However, the Fundamental Change provisions will not afford protection to holders of Convertible Notes in the event of other transactions that could adversely affect the Convertible Notes. For example, transactions such as leveraged recapitalizations, refinancings, restructurings or acquisitions initiated by us may not constitute a Fundamental Change requiring us to repurchase the Convertible Notes. In the event of any such transaction, holders would not have the right to require us to repurchase their Convertible Notes, even though each of these transactions could increase the amount of our indebtedness or otherwise adversely affect our capital structure or any credit ratings, thereby adversely affecting the value of the Convertible Notes.

Holders of the Convertible Notes may not be able to accelerate the maturity of the Convertible Notes if we fail to make our SEC filings in a timely manner.

The Indenture requires us to furnish our SEC filings to the trustee no more than 15 days after the date on which we would have been required to file them with the SEC. The Indenture also requires us to comply with certain filing requirements as set forth in the Trust Indenture Act of 1939, as amended. However, the Indenture does not require us to file any such reports on a timely basis with the SEC. Accordingly, holders of Convertible Notes may not be able to accelerate the maturity of the Convertible Notes if we fail to make our SEC filings in a timely manner.

We cannot assure you that an active trading market will be maintained for the Convertible Notes. Holders of the Convertible Notes may be unable to sell their Convertible Notes at the price they desire or at all.

We do not intend to apply for listing of the Convertible Notes on any securities exchange or to arrange for quotation on any interdealer quotation system. The liquidity of the trading market in the Convertible Notes, and the market price quoted for these Convertible Notes, may be adversely affected by, among other things:

changes in the overall market for debt securities;
changes in our financial performance or prospects;
the prospects for companies in our industry generally;
the number of holders of the Convertible Notes;
the interest of securities dealers in making a market for the Convertible Notes;
the time remaining to the maturity of the Convertible Notes;
the outstanding amount of the Convertible Notes;
the market price and volatility of our common stock; and
prevailing interest rates.

Historically, the market for convertible debt has been subject to disruptions that have caused volatility in prices. It is possible that the market for the Convertible Notes will be subject to disruptions that may have a negative effect on

holders of the Convertible Notes, regardless of our operating results, financial performance or prospects.

As a result, we cannot assure holders of the Convertible Notes that an active trading market will be maintained for the Convertible Notes. If an active trading market is not maintained, the market price and liquidity of the Convertible Notes may be adversely affected. In that case, investors in the Convertible Notes may not be able to sell the Convertible Notes at a particular time or at a favorable price.

Any adverse rating of the Convertible Notes may cause their trading price to fall.

We do not intend to seek a rating on the Convertible Notes. However, if a rating service were to rate the Convertible Notes and if such rating service were to lower its rating on the Convertible Notes below the rating initially assigned to the Convertible Notes or otherwise announce its intention to put the Convertible Notes on credit watch, the trading price of the Convertible Notes could decline.

Developments in the convertible debt markets may adversely affect the market value of the Convertible Notes.

We expect that many investors in, and potential purchasers of, the Convertible Notes will employ, or seek to employ, a convertible arbitrage strategy with respect to the Convertible Notes. Investors that employ a convertible arbitrage strategy with respect to convertible debt instruments typically implement that strategy by selling short the common stock underlying the Convertible Notes and dynamically adjusting their short position while they hold the Convertible Notes. As a result, any specific rules regulating short selling of securities or other governmental action that interferes with the ability of market participants to effect short sales in our common stock could adversely affect the ability of investors in, or potential purchasers of, the Convertible Notes to conduct the convertible arbitrage strategy that we believe they will employ, or seek to employ, with respect to the Convertible Notes. This could, in turn, adversely affect the market price and liquidity of the Convertible Notes.

Holders of the Convertible Notes may be subject to tax if we make or fail to make certain adjustments to the conversion rate of the Convertible Notes even if they do not receive a corresponding cash distribution.

The conversion rate of the Convertible Notes is subject to adjustment in certain circumstances, including the payment of cash dividends. If the conversion rate is adjusted as a result of a distribution that is taxable to our common stockholders, such as a cash dividend, holders of the Convertible Notes may be deemed to have received a dividend subject to U.S. federal income tax even if they have not received any cash. In addition, a failure to adjust (or to adequately adjust) the conversion rate after an event that increases a Convertible Note holder’s proportionate interest in our assets and earnings could be treated as a deemed taxable dividend to the Convertible Note holder. If a Make-Whole Fundamental Change occurs prior to the maturity date of the Convertible Notes, under some circumstances, we will increase the conversion rate for Convertible Notes converted in connection with the Make-Whole Fundamental Change. Such increase may also be treated as a distribution subject to U.S. federal income tax as a dividend.

Future issuances of our common stock or instruments convertible or exercisable into our common stock, including in connection with conversions of Convertible Notes or exercises of warrants, may materially and adversely affect the price of our common stock, the Warrants and the Convertible Notes and cause dilution to our existing stockholders.

We may obtain additional funds through public or private debt or equity financings in the near future, subject to certain limitations in the agreements governing our indebtedness, including our secured indebtedness with TriplePoint. If we issue additional shares of common stock or instruments convertible into common stock, it may materially and adversely affect the price of our common stock and, in turn, the price of the Warrants. In addition, the conversion of some or all of the Convertible Notes and/or exercise of our Warrants may dilute the ownership interests of our stockholders, and any sales in the public market of any of our common stock issuable upon such conversion or exercise could adversely affect prevailing market prices of our common stock and Warrants. Additionally, under the terms of the Warrants, in the event that a Warrant is exercised at a time when we do not have an effective registration statement covering the underlying shares of common stock on file with the SEC, such Warrant must be net exercised, which will dilute the ownership interests of existing stockholders without any corresponding benefit to the Company of a cash payment for the exercise price of such Warrant.

As of December 31, 2013, there were 9,708,296 shares of common stock issuable upon conversion of the outstanding Convertible Notes at the conversion rate in effect on December 31, 2013 (which amount includes 4,982,782 shares of common stock issuable in full satisfaction of the Coupon Make-Whole Payments due in connection therewith). If our stock price decreases, the number of shares we would be required to deliver in connection with the Coupon Make-Whole payments would increase. As of December 31, 2013, approximately $18.1 million in principal amount of the Convertible Notes has been converted in exchange for 3,179,608 shares of our common stock. The anticipated conversion of the remaining approximately $26.9 million in principal amount of Convertible Notes into shares of our common stock could depress the trading price of our common stock and Warrants.

Holders of the Convertible Notes that elect to convert some or all of their Convertible Notes prior to July 1, 2017 will be entitled to receive a Coupon Make-Whole Payment for the Convertible Notes being converted. We have the option to issue our common stock to any converting holder in lieu of making the Coupon Make-Whole Payment in cash. If we elect to issue our common stock for such payment, then the stock will be valued at 90% of the simple average of the daily volume weighted average prices of our common stock for the 10 trading days ending on and including the trading day immediately preceding the conversion date. Given that the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, may prohibit us from paying, repurchasing or redeeming the Convertible Notes or making cash payments in respect of the Coupon Make-Whole Payment upon a conversion, we may be unable to make such payment in cash. As of December 31, 2013, we have issued 2,957,775 shares of our

common stock in satisfaction of Coupon Make-Whole Payments due in connection with the conversion of the Convertible Notes. If we elect to issue additional shares of our common stock for such payments, this may cause significant additional dilution to our existing stockholders.

The issuance of share-based payment awards under our stock incentive plan may cause dilution to our existing stockholders and may affect the market price of our common stock.

We have used, and in the future we may continue to use, stock options, stock grants and other equity-based incentives, either pursuant to our Amended and Restated 2010 Stock Incentive Plan (the "2010 Plan"), or outside of the 2010 Plan, to provide motivation and compensation to our directors, officers, employees and key independent consultants. The award of any such incentives will result in an immediate and potentially substantial dilution to our existing shareholders and could result in a decline in the value of our stock price.

As of December 31, 2013, there were 2,871,563 shares subject to outstanding options that are or will become eligible for sale in the public market to the extent permitted by any applicable vesting requirements and Rules 144 and 701 under the Securities Act. The exercise of these options and the sale of the underlying shares of common stock and the sale of stock issued pursuant to stock grants may have an adverse effect upon the price of our common stock, which in turn may have an adverse effect upon the trading price of the Warrants.

As of December 31, 2013, we have 7,316,717 shares of common stock reserved for issuance under our stock incentive plans and our employee stock purchase plan. These shares can be freely sold in the public market upon issuance and once vested.

We may pay vendors in stock as consideration for their services; this may result in additional costs and may cause dilution to our existing stockholders.

In order for us to preserve our cash resources, we may in the future pay vendors, including technology partners, in shares, warrants or options to purchase shares of our common stock rather than cash. Payments for services in stock may materially and adversely affect our stockholders by diluting the value of outstanding shares of our common stock. In addition, in situations where we agree to register the shares issued to a vendor, this will generally cause us to incur additional expenses associated with such registration.

We cannot assure our stockholders that our stock repurchase program will enhance long-term stockholder value, and stock repurchases could increase the volatility of the price of our common stock and will diminish our available cash.

In January 2013, our board of directors approved a stock repurchase program for up to $15 million of our common stock over a one-year period. We expect to fund any repurchases under the stock repurchase program with cash and cash equivalents on hand. The timing and actual number of shares repurchased will depend on a variety of factors including the timing of open trading windows, price, corporate and regulatory requirements, an assessment by management and our board of directors of cash availability and other market conditions. The program may be suspended or discontinued at any time without prior notice. Repurchases pursuant to our stock repurchase program could affect the price of our common stock and increase its volatility. The existence of our stock repurchase program could also cause the price of our common stock to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for our common stock. Additionally, repurchases under our stock repurchase program will diminish our cash reserves, which could impact our ability to further develop our technology, access and/or Retrofit additional facilities and service our indebtedness. There can be no assurance that any stock repurchases will enhance stockholder value because the market price of our common stock may decline below the levels at which we repurchased such shares. Any failure to repurchase shares after we have announced our intention to do so may negatively impact our reputation and investor confidence in us and may negatively impact our stock price.

Although our stock repurchase program is intended to enhance long-term stockholder value, short-term stock price fluctuations could reduce the program's effectiveness.

We are subject to anti-takeover provisions in our amended and restated certificate of incorporation, as amended (our "Certificate of Incorporation"), and amended and restated bylaws and under Delaware law that could delay or prevent an acquisition of the Company, even if the acquisition would be beneficial to our stockholders.

Provisions in our Certificate of Incorporation and our amended and restated bylaws may delay or prevent an acquisition of us. Among other things, our Certificate of Incorporation and amended and restated bylaws provide for a board of directors that is divided into three classes with staggered three-year terms, provide that all stockholder action must be effected at a duly called meeting of the stockholders and not by a consent in writing, and further provide that only our board of directors may call a special meeting of the stockholders. These provisions may also frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, who are responsible for

appointing the members of our management team. Furthermore, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits, with some exceptions, stockholders owning in excess of 15% of our outstanding voting stock from merging or combining with us. Finally, our charter documents establish advance notice requirements for nominations for election to our board of directors and for proposing matters that can be acted upon at stockholder meetings. Although we believe these provisions together provide an opportunity to receive higher bids by requiring potential acquirers to negotiate with our board of directors, they would apply even if an offer to acquire the Company may be considered beneficial by some stockholders.

Concentration of ownership among our affiliates may prevent other stockholders from influencing significant corporate decisions and depress our stock price.

Our affiliates who held our common stock as of December 31, 2013 together control approximately 23% of our outstanding common stock, with a single stockholder, Khosla Ventures I, L.P. and its affiliates, controlling approximately 14% of our outstanding common stock. If our affiliates or a group of our affiliates act together, they will be able to exert a significant degree of influence over our management and affairs and control matters requiring stockholder approval, including the election of directors and approval of mergers or other business combination transactions. The interests of this concentration of ownership may not always coincide with our interests or the interests of other stockholders. For instance, our affiliates, acting together, could cause us to enter into transactions or agreements that we would not otherwise consider. Similarly, this concentration of ownership may have the effect of delaying or preventing a change in control of the Company otherwise favored by our other stockholders and holders of Warrants. This concentration of ownership could depress our stock price, which would in turn depress the trading price of the common stock and Warrants.

If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our stock price and trading volume could decline. The trading market for our common stock will be influenced by the research and reports that securities or industry analysts publish about us or our business.

We do not have any control over these analysts. If one or more of the analysts who cover us downgrade our stock or change their opinion of our stock, our stock price would likely decline which in turn would likely cause a decline in the value of the Warrants and the Convertible Notes. If one or more of these analysts cease coverage of the Company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price and the price of the Warrants and Convertible Notes to decline or the trading volume of such securities to decline.

We do not anticipate paying cash dividends, and accordingly, stockholders must rely on stock appreciation for any return on their investment.

Under the terms of the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, subject to certain limited exceptions, Agri-Energy is only permitted to pay dividends if the following conditions are satisfied: (i) the Retrofit of the Agri-Energy Facility is complete and the facility is producing commercial volumes of isobutanol, (ii) its net worth is greater than or equal to $10.0 million, and (iii) no event of default has occurred and is continuing under the agreement. Agri-Energy is also permitted to make dividends and distributions to Gevo, Inc. for certain defined purposes related to the Convertible Notes. Accordingly, even if we decide to pay cash dividends in the future, we may not be able to access cash generated by Agri-Energy if amounts are then outstanding pursuant to such agreements. We have never paid cash dividends on our common stock and we do not expect to pay cash dividends on our common stock at any time in the foreseeable future. The future payment of dividends directly depends upon our future earnings, capital requirements, financial requirements and other factors that our board of directors will consider. As a result, only appreciation of the price of our common stock, which may never occur, will provide a return to

stockholders. Investors seeking cash dividends should not invest in our common stock.

We may not be able to comply with all applicable listing requirements or standards of the NASDAQ Global Market and NASDAQ could delist our common stock.

Our common stock is listed on the NASDAQ Global Market. In order to maintain that listing, we must satisfy minimum financial and other continued listing requirements and standards. There can be no assurance that we will be able to comply with applicable listing standards. In the event that our common stock is not eligible for quotation on another market or exchange, trading of our common stock could be conducted in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for, our common stock, and there would likely be a reduction in our coverage by security analysts and the news media, which could cause the price of our common stock to decline further. In addition, it may be difficult for us to raise additional capital if we are not listed on a major exchange. Furthermore, it would be a Fundamental Change under the Indenture if our common stock is not listed on a national securities exchange. In such circumstance we would be required to offer to repurchase the

Convertible Notes at 100% plus accrued and unpaid interest, to, but not including, the repurchase date. Such offers may be prohibited by the agreements governing our indebtedness, including our secured indebtedness with TriplePoint.

Significant holders or beneficial holders of our common stock may not be permitted to exercise Warrants that they hold.

The Warrant Agreement governing the Warrants will prohibit a holder from exercising its Warrants if doing so would result in such holder beneficially owning more than 19.999% of our common stock or any other Class. Furthermore, during any period in which a holder beneficially owns less than 10% of our common stock or any other Class, the Warrant Agreement will limit the ability of such holder to exercise its Warrants if doing so would result in such holder beneficially owning more than 9.999% of our common stock or any other Class. Also, during any period in which a holder beneficially owns less than 5% of our common stock or any other Class, the Warrant Agreement will limit the ability of such holder to exercise its Warrants if doing so would result in such holder beneficially owning more than 4.999% of our common stock or any other Class. As a result, a holder of Warrants may not be able to exercise its Warrants for shares of our common stock at a time when it would be financially beneficial for them to do so. In such circumstance they could seek to sell their Warrants to realize value, but they may be unable to do so.

We cannot assure you that an active trading market will be maintained for the Warrants.

If an active trading market is not maintained, the market price and liquidity of the Warrants may be adversely affected. In that case, investors in the Warrants may not be able to sell the Warrants at a particular time or at a favorable price.

Holders of our Warrants will have no rights as common stockholders until such holders exercise their Warrants and acquire our common stock.

Until a holder of our Warrants acquires shares of our common stock upon exercise of their Warrants, they will have no rights with respect to the shares of our common stock underlying such Warrants. Upon exercise of our Warrants, the holder thereof will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

The exercise price for the Warrants will not be adjusted for all dilutive events.

The exercise price for the Warrants is subject to adjustment for certain events, including the issuance of stock dividends on our common stock and, in certain instances, the issuance of our common stock at a price per share less than the exercise price of the Warrants. However, the exercise rate will not be adjusted for other events, including the issuance of certain rights, options or Warrants, distributions of capital stock, indebtedness, or assets and cash dividends. Accordingly, an event that adversely affects the value of the Warrants may occur, and that event may not result in an adjustment to the exercise price.

We may not be permitted by the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, to repurchase the Warrants, and we may not have the ability to do so.

Under certain circumstances, if an extraordinary transaction (as defined in the Warrants) occurs, holders of the Warrants may require us to repurchase, for cash, the remaining unexercised portion of such Warrants for an amount of cash equal to the value of the Warrant as determined in accordance with the Black Scholes option pricing model and the terms of the Warrants. Our ability to repurchase the Warrants depends on our ability to generate cash flow in the future. To some extent, this is subject to general economic, financial, competitive, legislative and regulatory factors and other factors that are beyond our control. We cannot assure you that we will maintain sufficient cash reserves or

that our business will generate cash flow from operations at levels sufficient to permit us to repurchase the Warrants. In addition, any such repurchase of the Warrants may result in a default under the agreements governing our indebtedness, including our secured indebtedness with TriplePoint, unless we are able to obtain the applicable lender's consent prior to the taking of such action. If we were unable to obtain such consent, compliance with the terms of the Warrants could trigger an event of default under such agreements.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters and research and development laboratories, included in our Gevo, Inc. segment, are located in Englewood, Colorado, where we occupy approximately 29,865 square feet of office and laboratory space. Our lease for this facility expires in July 2016. We believe that the facility that we currently lease is adequate for our needs for the immediate future and that, should it be needed, additional space can be leased to accommodate any future growth. Our subsidiary, Agri-Energy, included in our Gevo Development/Agri-Energy segment, owns and operates an ethanol and isobutanol production facility in Luverne, Minnesota on approximately 55 acres of land and contains approximately 50,000 square feet of building space. The production facility was originally constructed in 1998. The land and buildings are owned by Agri-Energy which granted to TriplePoint a mortgage lien and security interest in such property to secure its obligations under the Amended Agri-Energy Loan Agreement with TriplePoint.

Item 3. Legal Proceedings

On January 14, 2011, Butamax filed a complaint (the "Complaint") in the Delaware District Court, as Case No. 1:11-cv-00054-SLR, alleging that we are infringing one or more claims made in U.S. Patent No. 7,851,188 (the "'188 Patent"), entitled "Fermentive Production of Four Carbon Alcohols." The '188 Patent, which has been assigned to Butamax, claims certain recombinant microbial host cells that produce isobutanol and methods for the production of isobutanol using such host cells. Butamax is seeking a declaratory judgment, injunctive relief, damages and costs, including attorney's fees and expenses. On March 25, 2011, we filed a response to the Complaint, denying Butamax's allegations of infringement and raising affirmative defenses.

On August 11, 2011, Butamax amended the Complaint to include allegations that we are infringing one or more claims made in U.S. Patent No. 7,993,889 (the "'889 Patent"), also entitled "Fermentive Production of Four Carbon Alcohols" (the "Amended Complaint"). The '889 Patent, which has been assigned to Butamax, claims methods for producing isobutanol using certain recombinant yeast microorganisms expressing an engineered isobutanol biosynthetic pathway. We believe that the Amended Complaint is without merit and will continue to aggressively defend our freedom to operate.

On September 13, 2011, we filed an answer to the Amended Complaint in which we asserted counterclaims against Butamax and DuPont for infringement of U.S. Patent No. 8,017,375 (the "'375 Patent"), entitled "Yeast Organism Producing Isobutanol at a High Yield" and U.S. Patent No. 8,017,376 (the "'376 Patent"), entitled "Methods of Increasing Dihydroxy Acid Dehydratase Activity to Improve Production of Fuels, Chemicals, and Amino Acids." The counterclaims sought a declaratory judgment, injunctive relief, damages and costs, including attorney's fees and expenses. These counterclaims were set for trial in August 2013. On July 26, 2013, the Delaware District Court issued an order regarding claim construction and summary judgment of Gevo's counterclaims involving the '375 and '376 Patents. Both parties had asked the Delaware District Court to resolve certain issues regarding the '375 and '376 Patents without a trial by seeking summary judgment from the Delaware District Court. Butamax had filed motions seeking summary judgment that it did not infringe such patents and the Delaware District Court granted Butamax's motions on this issue. Butamax had also moved for summary judgment of invalidity on both patents. The Delaware District Court granted Butamax's motion of invalidity on the '375 Patent, but denied Butamax's motion of invalidity on the '376 Patent. On August 8, 2013, an order was issued by the Delaware District Court which entered a final judgment of non-infringement in favor of Butamax and DuPont with respect to the claims of the '375 and '376 Patents. The August 8, 2013 order also entered a final judgment of invalidity in favor of Butamax and DuPont with respect to the claims of the '375 Patent. In addition, it was further ordered that the Butamax and DuPont claims and counterclaims relating to the unenforceability of the '375 Patent, and the invalidity and/or unenforceability of the '376 Patent, would be dismissed without prejudice, and that the Butamax and DuPont claims for exceptional case, attorney's fees and/or costs would be preserved for later presentation to the Delaware District Court. As a result of the August 8, 2013 order, a trial did not occur on August 12, 2013 as previously scheduled.

On September 22, 2011, Butamax filed a motion for preliminary injunction with respect to the alleged infringement by us of one or more claims made in the ’889 Patent.

On January 24, 2012, we filed a complaint in the Delaware District Court, as Case No. 1:12-cv-00070-SLR, alleging that Butamax and DuPont are infringing one or more claims made in U.S. Patent No. 8,101,808 (the “’808 Patent”) entitled “Recovery of Higher Alcohols from Dilute Aqueous Solutions.” The ’808 Patent claims methods to produce a C3-C6 alcohol—for example, isobutanol—through fermentation and to recover that alcohol from the fermentation medium. We sought a declaratory judgment, injunctive relief, damages and costs, including attorney’s fees and expenses. On May 8, 2013, we stipulated and agreed to dismiss without prejudice the ’808 Patent suit against Butamax, DuPont, or their affiliates, with each side bearing its own costs and fees in the action. Gevo and Butamax further stipulated and agreed that we shall not re-assert the ’808 Patent against Butamax, DuPont, or their affiliates until a final Certificate of Reexamination is received from the USPTO in Inter Partes Reexamination Control No. 95/000,666.

On March 12, 2012, Butamax filed a complaint in the Delaware District Court, as Case No. 1:12-cv-00298-SLR, alleging that we are infringing one or more claims made in U.S. Patent No. 8,129,162, entitled “Ketol-Acid Reductoisomerase Using NADH.” This

complaint is in addition to the Amended Complaint discussed above. Butamax is seeking a declaratory judgment, injunctive relief, damages, interest, costs and expenses, including attorney's fees. We believe that we have meritorious defenses to these claims and intend to vigorously defend this lawsuit.

On March 13, 2012, we filed a complaint in the Delaware District Court, as Case No. 1:12-cv-00301-SLR, alleging that Butamax and DuPont are infringing U.S. Patent No. 8,133,715 (the "'715 Patent"), entitled "Reduced By-Product Accumulation for Improved Production of Isobutanol." The '715 Patent claims recombinant microorganisms, including yeast, with modifications for the improved production of isobutanol. We are seeking a declaratory judgment, injunctive relief, damages and costs, including attorney's fees and expenses.

On April 10, 2012, we filed a complaint (the "Gevo Complaint") in the Delaware District Court, as Case No. 1:12-cv-00448-SLR, alleging that Butamax and DuPont are infringing one or more claims made in U.S. Patent No. 8,153,415 (the "'415 Patent") entitled "Reduced By-Product Accumulation for Improved Production of Isobutanol." The '415 Patent claims technology which eliminates two pathways that compete for isobutanol pathway intermediates in yeast. We are seeking a declaratory judgment, injunctive relief, damages and costs, including attorney's fees and expenses.

On April 17, 2012, we amended the Gevo Complaint to include allegations that Butamax and DuPont are infringing one or more claims made in U.S. Patent No. 8,158,404 (the "'404 Patent") entitled "Reduced By-Product Accumulation for Improved Production of Isobutanol." The '404 Patent claims the reduction or elimination of important enzymes in a pathway in isobutanol-producing yeast. We are seeking a declaratory judgment, injunctive relief, damages and costs, including attorney's fees and expenses.

On May 9, 2012, coordinated discovery was ordered for Case Nos. 1:12-cv-00070-SLR, 1:12-cv-00298-SLR, 1:12-cv-00301-SLR, and 1:12-cv-00448-SLR. By virtue of the same order, discovery in Case No. 1:12-cv-00602-SLR was also coordinated with these cases.

On May 15, 2012, Butamax filed a complaint in the Delaware District Court, as Case No. 1:12-cv-00602-SLR, alleging that we are infringing one or more claims made in U.S. Patent No. 8,178,328, entitled "Fermentive Production of Four Carbon Alcohols." Butamax is seeking a declaratory judgment, injunctive relief, damages, interest, costs and expenses, including attorney's fees. We believe that we have meritorious defenses to these claims and we intend to vigorously defend this lawsuit.

On June 19, 2012, the Delaware District Court denied the motion for preliminary injunction which was filed by Butamax on September 22, 2011 with respect to the alleged infringement by us of one or more claims made in the '889 Patent. As is normal and customary in patent infringement actions of this nature, Butamax then filed a notice of appeal. In connection with their appeal, Butamax also filed a motion with the Delaware District Court seeking a temporary order to limit our activities with respect to the automotive fuel blending market while Butamax appealed the denial of its motion for preliminary injunction.

On July 6, 2012, the Delaware District Court issued a temporary order which stated, in part, that we could not deliver, provide, distribute, ship, release or transfer in any way bio-isobutanol produced at the Agri-Energy Facility to any third party for any use or purpose related to the automotive fuel blending market while Butamax appealed the denial of its motion for preliminary injunction. We filed an appeal of the temporary order. Under the temporary order, we remained free to operate in markets such as chemicals, jet fuel, marine fuel and small engine fuel. On August 10, 2012, the Federal Circuit Court of Appeals granted Gevo's motion to stay the status quo order entered on July 6, 2012 by the Delaware District Court. On November 16, 2012, the Federal Circuit Court of Appeals affirmed the Delaware District Court's denial of Butamax's preliminary injunction motion.

On July 31, 2012, we filed a complaint in the United States District Court for the Eastern District of Texas, as Case No. 2:12-cv-00417, alleging that Butamax, DuPont, BP p.l.c., BP Corporation North America Inc. and BP Biofuels North America LLC are infringing U.S. Patent No. 8,232,089 (the "'089 Patent), entitled "Cytosolic Isobutanol Pathway Localization for the Production of Isobutanol." We are seeking a declaratory judgment, injunctive relief, damages and costs, including attorney's fees and expenses. On December 17, 2012, this case was transferred to the Delaware District Court as Case No. 1:12-cv-01724-SLR. On February 19, 2013, BP p.l.c. filed a motion seeking to dismiss our complaint for failure to state a claim against it. On March 8, 2013, we filed a response in opposition to BP p.l.c.'s motion. On March 18, 2013, BP p.l.c. filed its reply brief, and the issue was submitted to the court for decision. On July 8, 2013, the court granted BP p.l.c.'s motion. Despite the court's decision, Butamax, DuPont, BP Corporation North America Inc. and BP Biofuels North America LLC remain defendants in the suit.

On July 31, 2012, Butamax and DuPont filed a lawsuit in the Delaware District Court for declaratory judgment against us, as Case No. 1:12-cv-00999-SLR, seeking a judicial determination that the '089 Patent is invalid and that Butamax and DuPont do not infringe it. On January 28, 2013, this case was closed following a voluntary stipulation of dismissal filed by both parties.

On August 6, 2012, Butamax filed a complaint in the Delaware District Court, as Case No. 1:12-cv-01014-SLR, alleging that we are infringing U.S. Patent No. 8,222,017, entitled "Ketol-Acid Reductoisomerase Using NADH." Butamax is seeking a declaratory judgment, injunctive relief, damages and costs, including attorney's fees and expenses. On January 22, 2013, discovery in this case was consolidated with Case Nos. 1:12-cv-00070-SLR, 1:12-cv-00298-SLR, 1:12-cv-00301-SLR, 1:12-cv-00448-SLR, and 1:12-cv-00602-SLR. In December 2013, we withdrew claims of infringement against Butamax in Case Nos. 1:12-cv-00301-SLR, and 1:12-cv-00448-SLR. Despite the withdrawal of our infringement claims against Butamax in Case Nos. 1:12-cv-00301-SLR and 1:12-cv-00448-SLR, Butamax continues to pursue counterclaims of invalidity in these cases. Case Nos. 1:12-cv-00298-SLR, 1:12-cv-00301-SLR, 1:12-cv-00448-SLR, 1:12-cv-00602-SLR, and 1:12-cv-01014-SLR are currently set for trial in July and August of 2014.

On August 14, 2012, we filed a lawsuit in the United States District Court for the Eastern District of Texas for declaratory judgment against Butamax, DuPont, BP p.l.c., BP Corporation North America Inc. and BP Biofuels North America LLC, as Case No. 2:12-cv-00435, seeking a judicial determination that a recently issued Butamax U.S. Patent No. 8,241,878 (the "'878 Patent"), entitled "Recombinant Yeast Host Cell with Fe-S Cluster Proteins and Methods of Using Thereof" is invalid and that Gevo does not infringe it. On December 17, 2012, this case was transferred to the Delaware District Court as Case No. 1:12-cv-01725-SLR. On January 28, 2013, this case was closed following a voluntary stipulation of dismissal filed by both parties.

On August 14, 2012, Butamax filed a complaint in the Delaware District Court, as Case No. 1:12-cv-01036-SLR, alleging that we are infringing the '878 Patent. Butamax is seeking a declaratory judgment, injunctive relief, damages and costs, including attorney's fees and expenses.

On September 25, 2012, we filed a complaint in the Delaware District Court, as Case No. 1:12-cv-01202-SLR, alleging that Butamax and DuPont are infringing U.S. Patent No. 8,273,565 (the "'565 Patent"), entitled "Methods of Increasing Dihydroxy Acid Dehydratase Activity to Improve Production of Fuels, Chemicals, and Amino Acids." We are seeking a declaratory judgment, injunctive relief, damages and costs, including attorney's fees and expenses. On September 25, 2012, Butamax and DuPont filed a lawsuit in the Delaware District Court for declaratory judgment against us, as Case No. 1:12-cv-01201-SLR, seeking a judicial determination that the '565 Patent is invalid and that Butamax and DuPont do not infringe it. On August 9, 2013, Case Nos. 1:12-cv-01202-SLR and 1:12-cv-01201-SLR were closed following a voluntary stipulation of dismissal filed by both parties.

On September 25, 2012, Butamax filed a complaint in the Delaware District Court, as Case No. 1:12-cv-01200-SLR, alleging that we are infringing U.S. Patent No. 8,273,558, entitled "Fermentive Production of Four Carbon Alcohols." Butamax is seeking a declaratory judgment, injunctive relief, damages and costs, including attorney's fees and expenses.

On October 8, 2012, Butamax filed a complaint in the Delaware District Court, as Case No. 1:12-cv-01300-SLR, alleging that we are infringing U.S. Patent No. 8,283,144, entitled "Fermentive Production of Four Carbon Alcohols." Butamax is seeking a declaratory judgment, injunctive relief, damages and costs, including attorney's fees and expenses.

On October 8, 2012, Butamax filed a lawsuit in the Delaware District Court for declaratory judgment against us, as Case No. 1:12-cv-01301-SLR, seeking a judicial determination that Butamax is not infringing Gevo's U.S. Patent No. 8,283,505, entitled "Recovery of Higher Alcohols from Dilute Aqueous Solutions." On January 28, 2014 the U.S. District Court of Delaware issued an order dismissing Case No. 1:12-cv-01301-SLR.

On February 13, 2013, coordinated discovery was ordered for Case Nos. 1:12-cv-01036-SLR, 1:12-cv-01200-SLR, 1:12-cv-01201-SLR, 1:12-cv-01202-SLR, 1:12-cv-01300-SLR, 1:12-cv-01301-SLR, and 1:12-cv-01724-SLR. Case

Nos. 1:12-cv-01036-SLR, 1:12-cv-01200-SLR, 1:12-cv-01300-SLR, 1:12-cv-01301-SLR, and 1:12-cv-01724-SLR are currently set for trial in August 2015.

On March 19, 2013, the U.S. District Court of Delaware issued an order regarding claim construction and summary judgment in the patent suit involving the ’188 Patent and the ’889 Patent. Both parties had asked the Delaware District Court to resolve certain issues regarding the ’188 Patent and the ’889 Patent without a trial by seeking summary judgment from the court. Butamax had filed a motion seeking summary judgment that we infringed such patents, but the Delaware District Court denied Butamax’s motion. We moved for summary judgment of noninfringement, both as a matter of literal infringement and infringement under the doctrine of equivalents, and the Delaware District Court granted our motion regarding doctrine of equivalents infringement. We also moved for summary judgment of invalidity of various claims in the ’188 Patent and the ’889 Patent. The Delaware District Court granted this motion in part, ruling that Butamax’s claims related to the inactivation of competing pathways for carbon flow were invalid.

The Delaware District Court also provided certain claim construction rulings, including a ruling that Butamax’s patent claims were limited to an “acetohydroxy acid isomeroreductase” enzyme that is “NADPH-dependent.” The remaining issues were to be resolved by a jury trial, scheduled to commence on April 1, 2013.

On March 20, 2013, the U.S. District Court for the District of Delaware held the final pre-trial hearing leading up to the trial on the ’188 Patent and the ’889 Patent scheduled to commence April 1, 2013. During the hearing, Butamax’s attorney acknowledged that Gevo does not infringe such patents under the Delaware District Court’s construction of a key claim term in such patents, “acetohydroxy acid isomeroreductase.” Butamax offered to stipulate to no literal infringement under the Delaware District Court’s construction. In view of this stipulation and the Delaware District Court’s prior ruling of no infringement under Butamax’s alternative infringement theory, the doctrine of equivalents, on April 10, 2013 a judgment of no infringement was entered in favor of Gevo.

On April 19, 2013, Butamax filed a notice of appeal to the U.S. Court of Appeals for the Federal Circuit to appeal the Delaware District Court’s Memorandum and Order of March 19, 2013, and the Delaware District Court’s Amended Final Judgment of April 10, 2013. Oral arguments for the Butamax appeal were heard by the U.S. Court of Appeals for the Federal Circuit on November 7, 2013.

On February 18, 2014, the U.S. Court of Appeals for the Federal Circuit vacated the Delaware District Court’s denial of Butamax’s motion for summary judgment of literal infringement of the asserted claims of the ’188 Patent and the ’889 Patent and remanded the question of infringement to the Delaware District Court for reconsideration under a revised claim construction. The U.S. Court of Appeals for the Federal Circuit also vacated and remanded the Delaware District Court’s grant of Gevo’s motion for summary judgment of noninfringement under the doctrine of equivalents. The U.S. Court of Appeals for the Federal Circuit also reversed the Delaware District Court’s grant of Gevo’s motion for summary judgment of invalidity for lack of a written description of claims 12 and 13 of the ’889 Patent and the Delaware District Court’s order that those same claims are invalid for lack of enablement.

On February 18, 2014, the Delaware District Court granted Gevo’s motion to stay the litigation regarding Gevo’s ’715 Patent, ’404 Patent and ’415 Patent pending the USPTO’s issuance of a Right to Appeal Notice during inter partes re-examination of those patents.

The Delaware District Court has scheduled a mediation session between Gevo and Butamax on June 5, 2014.

Due to the nature and stage of this litigation, we have determined that the possible loss or range of loss related to this litigation cannot be reasonably estimated at this time. The next Delaware District Court trial for the Butamax litigation is currently scheduled for July 2014 and additional trials are currently scheduled for August 2014 and 2015. We expect to continue to incur significant costs related to our involvement in the foregoing legal proceedings.

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

Market for Common Stock

Our common stock has been traded on the NASDAQ Global Market under the symbol "GEVO" since February 9, 2011. The following table sets forth, for the period indicated, the high and low sales prices for our common stock, as reported by the NASDAQ Global Market, for the periods indicated below.

	Common Stock Price 2013		Price 2012	
	High	Low	High	Low
First Quarter	$2.75	$1.62	$10.49	$5.53
Second Quarter	2.34	1.53	9.99	4.95
Third Quarter	2.30	1.67	4.95	1.84
Fourth Quarter	2.18	1.12	2.18	1.38

Holders of Record

The last sale price of our common stock on March 31, 2014, as reported by the NASDAQ Global Market, was $1.17 per share. As of February 28, 2014, there were approximately 64 holders of record of our common stock. We believe that the number of beneficial owners is substantially greater than the number of record holders because a large portion of our common stock is held of record through brokerage firms in "street name."

Dividends

No cash dividends have been paid on our common stock to date, nor do we anticipate paying dividends in the foreseeable future.

Under the terms of the Amended Agri-Energy Loan Agreement, subject to certain limited exceptions, Agri-Energy is only permitted to pay dividends if the following conditions are satisfied: (i) the Retrofit of the Agri-Energy Facility is complete and the facility is producing commercial volumes of isobutanol, (ii) its net worth is greater than or equal to $10.0 million, and (iii) no event of default has occurred and is continuing under the agreement.

Performance Graph

Set forth below is a graph comparing the yearly change in the cumulative total return of Gevo's common stock with the cumulative total return of the Standard & Poor's SmallCap 600 Value Index and with the NASDAQ Clean Edge Green Energy Index over the period from the Company's inception of February 2011 through December 31, 2013.

It is assumed in the graph that $100 was invested (i) in our common stock; (ii) in the stocks of the companies in the Standard & Poor's SmallCap 600 Value Index; and (iii) in the stocks of the NASDAQ Clean Edge Green Energy Index.

The stock price performance shown on the following graph is not indicative of future price performance.

Recent Sales of Unregistered Securities; Use of Proceeds from Registered Securities

In December 2013, we entered into amendments to re-price the three outstanding warrants to purchase common stock of the Company that are held by TriplePoint, which are exercisable in the aggregate for 388,411 shares of the Company's common stock, to reflect an exercise price of $1.18 per share.

The transactions were deemed to be exempt from registration under the Securities Act in reliance upon Section 4(2) of the Securities Act as transactions by an issuer not involving a public offering. TriplePoint has represented to the Company that it is an accredited investor and that it has acquired the securities for investment only and not with a view toward the public sale or distribution thereof. TriplePoint has received written disclosures that the securities have not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from registration.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Item 6. Selected Financial Data

The following selected historical consolidated financial data should be read together with our consolidated financial statements and the accompanying notes appearing in Part II, Item 8 of this Report, and "Management's Discussion and Analysis of Financial Condition and Results of Operations." The selected historical consolidated financial data in this section is not intended to replace our historical consolidated financial statements and the accompanying notes. Our historical results are not necessarily indicative of our future results.

We derived the consolidated statements of operations data for the years ended December 31, 2013, 2012 and 2011 and the consolidated balance sheet data as of December 31, 2013 and 2012 from our audited consolidated financial statements in Part II, Item 8 of this Report. The consolidated statement of operations data for the years ended December 31, 2010 and 2009 and the consolidated balance sheet data as of December 31, 2011, 2010 and 2009 has been derived from our audited consolidated financial statements not included in this Report. The data should be read in conjunction with the consolidated financial statements, related notes, and other financial information included herein.

(In thousands except share and per share amounts)	Years Ended December 31,				
Consolidated statement of operations data:	2013	2012	2011	2010	2009
Total revenue (1) (2)	$8,224	$24,385	$64,549	$16,396	$660
Costs of goods and corn sold (1)	17,913	32,410	60,588	13,446	-
Operating expenses	45,826	63,412	48,654	38,463	19,229
Loss from operations	(55,515)	(71,437)	(44,693)	(35,513)	(18,569)
Net loss (3) (4)	(66,806)	(60,712)	(48,214)	(40,112)	(19,885)
Net loss attributable to Gevo, Inc. common stockholders	(66,806)	(60,712)	(49,308)	(42,890)	(19,885)
Net loss per share attributable to Gevo, Inc. common stockholders - basic and diluted	(1.48)	(1.86)	(2.15)	(37.44)	(18.07)
Weighted-average number of common shares outstanding - basic and diluted	45,071,618	32,619,091	22,909,916	1,145,500	1,100,294

	As of December 31,				
Consolidated balance sheet data:	2013	2012	2011	2010	2009
Cash and cash equivalents	$24,625	$66,744	$94,225	$15,274	$21,240
Total assets	116,355	156,111	133,030	51,609	26,383
Derivative warrant liability	7,243	-	-	2,034	982
Secured debt	10,127	23,958	28,243	20,432	7,701
Convertible notes, net	14,501	25,554	-	-	-
Total liabilities	45,380	58,280	40,893	31,650	11,300
Accumulated deficit	(262,153)	(195,347)	(134,635)	(85,327)	(42,437)
Total stockholders' equity	70,975	97,831	92,137	19,959	15,083

(1) We commenced the sale of ethanol in the fourth quarter of 2010 upon acquiring Agri-Energy.

(2) During the second quarter of 2012, we suspended the production of ethanol and commenced initial startup operations for the production of isobutanol.

(3) We recognized gains of $3.1 million and $17.0 million during the years ended December 31, 2013 and 2012, respectively, associated with a change in the fair value of the derivatives embedded in our Convertible Notes. We recognized a loss of $3.2 million during the year ended December 31, 2013 associated with a change in the fair value of Warrants to purchase our common stock that were issued in December 2013 in conjunction with our offering of common stock units.

(4) During the year ended December 31, 2013, certain holders of our Convertible Notes elected to convert Convertible Notes in an aggregate principal amount $18.1 million into shares of our common stock, reducing the principal balance of the Convertible Notes to $26.9 million. Upon conversion, the holders of the Convertible Notes received 3,179,608 shares of Gevo, Inc. common stock in payment of converted principal of $18.1 million and, pursuant to the terms of the Indenture, such holders also received 2,957,775 shares of Gevo, Inc. common stock in settlement of Coupon Make-Whole Payments of $4.9 million. As a result, we recognized a loss of $2.0 million associated with the conversion of debt.

The following table reflects our unaudited summarized quarterly consolidated financial statements for each of the twelve months ended December 31, 2013 and 2012. This information has been derived from unaudited consolidated financial statements that, in the opinion of management, include all recurring adjustments necessary for a fair statement of such information (in thousands except share and per share amounts).

	Quarter			
2013	First	Second	Third	Fourth
Revenue	$3,543	$1,859	$1,127	$1,695
Gross loss (1)	(960)	(1,757)	(3,619)	(3,353)
Loss from operations	(12,886)	(13,864)	(15,763)	(13,002)
Loss on conversion of debt	(926)	(1,112)	-	-
(Loss) gain from change in fair value of embedded derivatives	(1,330)	2,023	1,587	834
Loss from change in fair value of derivative warrant liability	-	-	-	(3,195)
Net loss	(18,370)	(15,222)	(15,885)	(17,329)
Net loss attributable to Gevo, Inc. common stockholders	(18,370)	(15,222)	(15,885)	(17,329)
Net loss per share attributable to Gevo, Inc. common stockholders - basic and diluted	$(0.45)	$(0.35)	$(0.34)	$(0.35)
Weighted-average number of common shares outstanding - basic and diluted	40,996,922	43,371,992	46,052,867	49,758,100

	Quarter			
2012	First	Second	Third	Fourth
Revenue (2)	$14,872	$7,027	$562	$1,924
Gross loss (3)	(138)	(1,483)	(5,517)	(887)
Loss from operations	(18,220)	(15,746)	(24,426)	(13,045)
Gain from change in fair value of embedded derivatives	-	-	15,000	2,000
Net loss	(19,307)	(16,177)	(12,051)	(13,177)
Net loss attributable to Gevo, Inc. common stockholders	(19,307)	(16,177)	(12,051)	(13,177)
Net loss per share attributable to Gevo, Inc. common stockholders - basic and diluted	$(0.74)	$(0.62)	$(0.31)	$(0.34)
Weighted-average number of common shares outstanding - basic and diluted	26,186,133	26,242,940	38,547,441	39,300,054

(1) Gross loss during the 2013 third and fourth quarters primarily relates to costs associated with the startup operations and commissioning of the Agri-Energy Facility on corn mash for fully integrated production.
(2) During the second quarter of 2012, we suspended the production of ethanol and commenced initial startup operations for the production of isobutanol.
(3) Gross loss during the third quarter of 2012 includes $7.6 million of startup costs related to isobutanol production.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes that appear elsewhere in this Report. In addition to historical financial information, the following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those discussed below. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this Report, particularly in "Risk Factors."

We are a renewable chemicals and next generation biofuels company. Our strategy is to commercialize biobased alternatives to petroleum-based products to allow for the optimization of fermentation facilities' assets, with the ultimate goal of maximizing cash flows from the operation of those assets. Our underlying technology uses a combination of synthetic biology, metabolic and chemical engineering and chemistry. In order to implement this strategy, we are utilizing a building block approach. We intend to focus primarily on the production and sale of isobutanol and related products from renewable feedstocks. Isobutanol is a four-carbon alcohol that can be sold directly for use as a specialty chemical in the production of solvents, paints and coatings or as a value-added gasoline blendstock. Isobutanol can also be converted into butenes using dehydration chemistry deployed in the refining and petrochemicals industries today. The convertibility of isobutanol into butenes is important because butenes are primary hydrocarbon building blocks used in the production of hydrocarbon fuels, lubricants, polyester, rubber, plastics, fibers and other polymers.

We believe that products derived from our isobutanol will be drop-in products, which means that our customers will be able to replace petroleum-based intermediate products with renewable isobutanol-based intermediate products without modification to their equipment or production processes. The final products produced from our renewable isobutanol-based intermediate products should be chemically and physically identical to those produced from petroleum-based intermediate products, except that they will contain carbon from renewable sources. Customer interest in our renewable isobutanol is primarily driven by our production route, which we believe will be cost-efficient, and our renewable isobutanol's potential to serve as a cost-effective, environmentally sensitive alternative to the petroleum-based intermediate products that they currently use. We believe that at every step of the value chain, renewable products that are chemically identical to the incumbent petrochemical products will have lower market adoption hurdles in contrast with other bioindustrial products because the infrastructure and applications for such products already exist. In addition, we believe that products made from biobased isobutanol will be subject to less raw material cost volatility than the petroleum-based products in use today because of the lower historical cost volatility of agricultural feedstocks compared to oil.

In order to produce and sell isobutanol made from renewable sources, we have developed GIFT®, an integrated technology platform for the efficient production and separation of renewable isobutanol. GIFT® consists of two components, proprietary biocatalysts that convert sugars derived from multiple renewable feedstocks into isobutanol through fermentation, and a proprietary separation unit that is designed to continuously separate isobutanol during the fermentation process. We developed our technology platform to be compatible with the existing approximately 23 BGPY of global operating ethanol production capacity, as estimated by the RFA.

GIFT® is designed to permit (i) the Retrofit of existing ethanol capacity to produce isobutanol, ethanol or both products simultaneously, or (ii) the addition of renewable isobutanol or ethanol production capabilities to a facility's existing ethanol production by adding additional fermentation capacity side-by-side with the facility's existing ethanol fermentation capacity. Having the flexibility to switch between the production of isobutanol and ethanol, or produce both products simultaneously, should allow us to optimize asset utilization and cash flows at a facility by taking advantage of fluctuations in market conditions. GIFT® is also designed to allow relatively low capital expenditure Retrofits of existing ethanol facilities, enabling a rapid route to isobutanol production from the fermentation of renewable feedstocks. We believe that our production route will be cost-efficient and will enable rapid deployment of

our technology platform and allow our isobutanol and related renewable products to be economically competitive with many of the petroleum-based products used in the chemicals and fuels markets today.

We expect that the combination of our efficient proprietary technology, our marketing focus on providing drop-in substitutes for incumbent petrochemical products and our relatively low capital investment Retrofits will mitigate many of the historical issues associated with the commercialization of renewable chemicals and fuels.

In September 2009, Gevo, Inc. formed Gevo Development to develop isobutanol production assets using GIFT®. Gevo Development has a flexible business model and aims to secure access to existing ethanol capacity either through joint venture, licensing arrangements, tolling arrangements or direct acquisition.

Financial Condition

For the year ended December 31, 2013, we incurred a consolidated net loss of $66.8 million and had an accumulated deficit of $262.2 million. From inception to December 31, 2013, we have incurred significant net losses and have funded our operations primarily through equity offerings, issuances of debt, borrowings under our secured debt financing arrangements and revenues earned primarily from the sale of ethanol and related products. Our cash and cash equivalents at December 31, 2013 totaled $24.6 million which is primarily being used for the following: (i) operating activities and startup production of isobutanol at our Agri-Energy Facility; (ii) operating activities at our corporate headquarters in Colorado, including research and development work; (iii) capital improvements primarily associated with the Agri-Energy Facility; (iv) costs associated with optimizing isobutanol production technology; (v) costs associated with the ongoing litigation with Butamax; and (vi) debt service obligations. We expect to incur future net losses as we continue to fund the development and commercialization of our product candidates. Our transition to profitability is dependent upon, among other things, the successful development and commercialization of our product candidates and the achievement of a level of revenues adequate to support our existing cost structure. We may never achieve profitability or generate positive cash flows, and unless and until we do, we will continue to need to raise additional cash. Management intends to fund future operations through additional private and/or public offerings of debt or equity securities. In addition, management may seek additional capital through arrangements with strategic partners or from other sources, it may seek to restructure our secured debt with TriplePoint and it will continue to address the Company's cost structure. Notwithstanding, there can be no assurance that we will be able to raise additional funds, or achieve or sustain profitability or positive cash flows from operations. Based on our operating plan, existing working capital at December 31, 2013 was not sufficient to meet the cash requirements to fund planned operations through December 31, 2014 without additional sources of cash. These conditions raise substantial doubt about our ability to continue as a going concern.

Agri-Energy

In September 2010, we acquired the Agri-Energy Facility which we have Retrofitted for the production of isobutanol. As of December 31, 2013, we have incurred capital costs of approximately $65.7 million on the Retrofit of the Agri-Energy Facility. The Retrofit of the Agri-Energy Facility includes a number of additional capital costs that are unique to the design of the facility, including additional equipment that we believe will allow us to switch between ethanol and isobutanol production, or produce both products simultaneously, modifications to increase the potential production capacity of GIFT® at the Agri-Energy Facility and the establishment of an enhanced yeast seed train to accelerate the adoption of improved yeast at the Agri-Energy Facility and at future plants. Capital expenditures at the Agri-Energy Facility also include upfront design and engineering costs, plant modifications identified as necessary during initial startup operations for the production of isobutanol as well as capitalized interest. In May 2012, we commenced initial startup operations for the production of isobutanol at the Agri-Energy Facility. In September 2012, as a result of a lower than planned production rate of isobutanol we made the strategic decision to pause isobutanol production at the Agri-Energy Facility at the conclusion of startup operations to focus on optimizing specific parts of the process to further enhance isobutanol production rates. In 2013, we modified our Agri-Energy Facility which we believe will allow us to increase the production rate. In 2013, we modified our Agri-Energy Facility which we believe will allow us to increase the production rate. In June 2013, we resumed the limited production of isobutanol operating one fermenter and one GIFT® separation system in order to (i) verify that the modifications had significantly reduced the previously identified infections, (ii) demonstrate that our biocatalyst performs in the one million liter fermenters at the Agri-Energy Facility, and (iii) confirm GIFT® efficacy at commercial scale at the Agri-Energy Facility. In August 2013, we expanded production capacity at the Agri-Energy Facility by adding a second fermenter and second GIFT® system to further verify our results with a second configuration of equipment. For these initial production runs, we demonstrated fermentation operations at commercial scale combined with the use of our GIFT® separation system using a dextrose (sugar) feedstock. Based on the results of these initial production runs, in October 2013 we began commissioning the Agri-Energy Facility on corn mash to test isobutanol production run rates and to optimize

biocatalyst production, fermentation separation and water management systems. In March 2014, we decided to leverage the flexibility of our GIFT® technology and modify the Agri-Energy Facility which we believe will enable the simultaneous production of isobutanol and ethanol. In line with our strategy to maximize asset utilization and site cash flows, this configuration of the plant should allow us to continue to optimize our isobutanol technology at a commercial scale, while taking advantage of the strong ethanol margins currently available in the marketplace. As of December 31, 2013, we have incurred capital expenditures of approximately $65.7 million on the Retrofit of the Agri-Energy Facility. Capital expenditures at the Agri-Energy Facility include upfront design and engineering expenses, plant modifications identified as necessary during initial startup operations for the production of isobutanol as well as capitalized interest. The Retrofit of the Agri-Energy Facility also includes a number of additional capital costs that are unique to the design of the facility, including additional equipment that we believe will allow us to switch between ethanol and isobutanol production, modifications to increase the potential production capacity of GIFT® at the Agri-Energy Facility and the establishment of an enhanced yeast seed train to accelerate the adoption of improved yeast strains at the Agri-Energy Facility and at future plants.

Until May 2012, when we commenced initial Retrofit startup operations for the production of isobutanol at the Agri-Energy Facility, we derived revenue from the sale of ethanol, distiller's grains and other related products produced as part of the ethanol production process at the Agri-Energy Facility. Continued ethanol production during the Retrofit process allowed us to retain local staff for the future operation of the plant, maintain the equipment and generate cash flow. However, the continued production of ethanol alone is not our intended business and our future return on invested capital depends on our ability to produce and market

isobutanol and products derived from isobutanol. We believe that we will be able to transition back to the production and sale of ethanol and related products at the Agri-Energy Facility, in whole or in part, if we were to project positive cash flows from ethanol operations versus maintaining the facility at idle, including any costs related to the transition, but there is no guarantee that this will be the case. During 2013, we did not transition back to ethanol production because we were engaged in activities at the Agri-Energy Facility to optimize specific parts of our technology to further enhance isobutanol production rates. Following the commencement of full-scale commercial production of isobutanol, we do not expect to generate significant future revenues from the sale of ethanol produced at the Agri-Energy Facility. Accordingly, the historical operating results of our subsidiary, Agri-Energy, and the operating results reported during the Retrofit to isobutanol production may not be indicative of future operating results for Agri-Energy or Gevo once full-scale commercial production of isobutanol commences at the Agri-Energy Facility.

Revenues, Cost of Goods Sold and Operating Expenses

Revenues

During 2013, we generated revenue primarily from: (i) hydrocarbon sales consisting primarily of the sale of biojet fuel derived from our isobutanol for purposes of certification and testing; (ii) revenue from government grants and research and development programs; and (iii) sales of excess corn inventory.

During the years ended December 31, 2012 and 2011, we derived revenue primarily from the sale of ethanol and from grants, research and development programs. Substantially all ethanol sold through Agri-Energy from the date of acquisition through December 31, 2012 was sold to C&N pursuant to an ethanol purchase and marketing agreement.

Cost of Goods Sold and Gross (Loss) Margin

Our cost of goods sold during the years ended December 31, 2013 and 2012 primarily includes costs: (i) incurred in conjunction with the initial operations for the production of isobutanol at the Agri-Energy Facility; (ii) associated with the production of ethanol; and (iii) associated with the sale of excess corn inventory. Costs associated with the initial operations for the production of isobutanol include costs for direct materials, direct labor, plant utilities, including natural gas, and plant depreciation. Direct materials consist of dextrose for initial production of isobutanol, corn feedstock, denaturant and process chemicals. Direct labor includes compensation of personnel directly involved in production operations at the Agri-Energy Facility. Our cost of goods sold during the year ended December 31, 2011 primarily includes costs associated with the production of ethanol. We periodically enter into forward purchase contracts and exchange-traded futures contracts associated with corn. Accordingly, our cost of goods sold also includes gains or losses and/or changes in fair value from our forward purchase contracts and exchange-traded futures contracts.

Our gross (loss) margin is defined as our total revenues less our cost of goods sold.

Research and Development

Our research and development costs consist of expenses incurred to identify, develop and test our technologies for the production of isobutanol and the development of downstream applications thereof. Research and development expenses include personnel costs (including stock-based compensation), consultants and related contract research, facility costs, supplies, depreciation and amortization expense on property, plant and equipment used in product development, license fees paid to third parties for use of their intellectual property and patent rights and other overhead expenses incurred to support our research and development programs. Research and development expenses also include upfront fees and milestone payments made under licensing agreements and payments for sponsored research and university research gifts to support research at academic institutions.

Selling, General and Administrative

Selling, general and administrative expenses consist of personnel costs (including stock-based compensation), consulting and service provider expenses (including patent counsel-related costs), legal fees, marketing costs, corporate insurance costs, occupancy-related costs, depreciation and amortization expenses on property, plant and equipment not used in our product development programs or recorded in cost of goods sold, travel and relocation and hiring expenses.

We also record selling, general and administrative expenses for the operations of the Agri-Energy Facility that include administrative and oversight expenses, certain personnel-related expenses, insurance and other operating expenses.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with accounting policies generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities

at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Management evaluates such estimates and judgments on an on-going basis and makes adjustments as deemed necessary. Actual results could differ if different estimates and assumptions are used, or if conditions are significantly different in the future.

While our significant accounting policies are more fully described in Note 1 to our consolidated financial statements included in this Report, we believe that the following accounting policies are the most critical to aid you in fully understanding and evaluating our reported financial results and reflect the more significant judgments and estimates that we use in the preparation of our consolidated financial statements.

Accounting for Convertible Debt and Embedded Derivatives

In July 2012, we sold $45.0 million in aggregate principal amount of Convertible Notes. Terms of the Convertible Notes, include, among others: (i) rights to convert into shares of our common stock, including upon a Fundamental Change (as defined in the Indenture); and (ii) a Coupon Make-Whole Payment (as defined in the Indenture) in the event of a conversion by the holders of the Convertible Notes prior to July 1, 2017. We have determined that these specific terms are considered to be embedded derivatives in accordance with GAAP. Embedded derivatives are separated from the host contract, the Convertible Notes, and carried at fair value when: (a) the embedded derivative possesses economic characteristics that are not clearly and closely related to the economic characteristics of the host contract; and (b) a separate, stand-alone instrument with the same terms would qualify as a derivative instrument. We have concluded that the embedded derivatives within the Convertible Notes meet these criteria and, as such, must be valued separate and apart from the Convertible Notes and recorded at fair value each reporting period.

For purposes of accounting and financial reporting, we combine these embedded derivatives and value them together as one unit of accounting. At each reporting period, we record these embedded derivatives at fair value which is included as a component of the Convertible Notes on our consolidated balance sheets.

We have used a binomial lattice model in order to estimate the fair value of the embedded derivative in the Convertible Notes. A binomial lattice model generates two probable outcomes — one up and another down —arising at each point in time, starting from the date of valuation until the maturity date. A lattice was initially used to determine if the Convertible Notes would be converted, called or held at each decision point. Within the lattice model, the following assumptions are made: (i) the Convertible Notes will be converted early if the conversion value is greater than the holding value; or (ii) the Convertible Notes will be called if the holding value is greater than both (a) the Redemption Price (as defined in the Indenture) and (b) the conversion value plus the Coupon Make-Whole Payment at the time. If the Convertible Notes are called, then the holder will maximize their value by finding the optimal decision between (1) redeeming at the Redemption Price and (2) converting the Convertible Notes.

Using this lattice, we valued the embedded derivatives using the “with-and-without method,” where the value of the Convertible Notes including the embedded derivatives is defined as the “with,” and the value of the Convertible Notes excluding the embedded derivatives is defined as the “without.” This method estimates the value of the embedded derivatives by looking at the difference in the values between the Convertible Notes with the embedded derivatives and the value of the Convertible Notes without the embedded derivatives.

The lattice model requires the following inputs: (i) price of our common stock; (ii) Conversion Rate (as defined in the Indenture); (iii) Conversion Price (as defined in the Indenture); (iv) maturity date; (v) risk-free interest rate; (vi) estimated stock volatility; and (vii) estimated credit spread for the Company.

The following table sets forth the inputs to the lattice model used to value the embedded derivative.

	December 31,	
	2013	2012
Stock price	$1.43	$1.54
Conversion Rate	175.6697	175.6697
Conversion Price	$5.69	$5.69
Maturity date	July 1, 2022	July 1, 2022
Risk-free interest rate	2.8 %	1.7 %
Estimated stock volatility	65 %	79 %
Estimated credit spread	33 %	37 %

The following table sets forth the value of the Convertible Notes with and without the embedded derivatives and the fair value of the embedded derivatives (in thousands).

	December 31,	
	2013	2012
Fair value of Convertible Notes:		
With the embedded derivatives	$15,925	$26,000
Without the embedded derivatives	12,455	15,000
Estimated fair value of the embedded derivatives	$3,470	$11,000

Changes in certain inputs into the lattice model can have a significant impact on changes in the estimated fair value of the embedded derivatives. For example, a decrease in the estimated credit spread for the Company results in an increase in the estimated value of the embedded derivatives. Conversely, a decrease in the price of our common stock or a decline in the estimated stock volatility results in a decrease in the estimated fair value of the embedded derivatives. From the date the Convertible Notes were issued through December 31, 2012, we observed a significant decline in the market price of our common stock which resulted in a $17.0 million decline in the estimated fair value of our embedded derivatives from issuance through December 31, 2012. During 2013, the decline in the stock price and the estimated stock volatility resulted in a $3.1 million decrease in the estimated fair value of our embedded derivatives.

Derivative Warrant Liability

In December 2013, we sold 21,303,750 common stock units. Each common stock unit consisted of one share of our common stock and a warrant (each a “Warrant”) to purchase one share of our common stock. The agreement governing the Warrants (the “Warrant Agreement”) includes the following terms:

- the Warrants have an exercise price of $1.85 per share, subject to adjustment for certain events, including the issuance of stock dividends on our common stock and, in certain instances, the issuance of our common stock at a price per share less than the exercise price of the Warrants;
- the Warrants have an expiration date of December 16, 2018;
- a holder of Warrants may exercise the Warrants through a cashless exercise if, and only if, we do not have an effective registration statement then available for the issuance of the shares of our common stock. If an effective registration statement is available for the issuance of our common stock a holder may only exercise the Warrants through a cash exercise;
- the exercise price and the number and type of securities purchasable upon exercise of Warrants are subject to adjustment upon certain corporate events, including certain combinations, consolidations, liquidations, mergers, recapitalizations, reclassifications, reorganizations, stock dividends and stock splits, a sale of all or substantially all of our assets and certain other events; and
- in the event of an extraordinary transaction (as defined in the Warrant Agreement) generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our common stock, we or any successor entity will pay the Warrant holder, at the holder’s option, exercisable at any time concurrently with or within 30 days after the consummation of the extraordinary transaction, an amount of cash equal to the value of such holder’s Warrants as determined in accordance with the Black Scholes option pricing model and the terms of the Warrants.

Based on these terms, we have determined that the Warrants qualify as a derivative and, as such, are presented as derivative warrant liability on the consolidated balance sheets and recorded at fair value each reporting period. We determined the fair value of the Warrants as of December 31, 2013 to be $7.2 million based upon Level 1 inputs, the quoted market prices of the Warrants. We valued the Warrants on the date of issuance based upon Level 2 observable

market prices, using the “with-and-without method,” where the value of the common stock including the Warrants is defined as the “with,” and the value of the common stock excluding the Warrants as traded on the NASDAQ market is defined as the “without.” This method estimates the value of the Warrants by looking at the difference in the values between the common stock with the Warrants and the value of the common stock without the Warrants. Based upon this method, we estimated the value of the Warrants to be $4.0 million on the date of issuance. The increase in the estimated fair value of the Warrants represents an unrealized loss which has been recorded as a loss from the change in fair value of derivative warrant liability in the consolidated statements of operations.

Impairment of Property, Plant and Equipment

Our property, plant and equipment consist primarily of assets associated with the acquisition and Retrofit of the Agri-Energy Facility. We assess impairment of property, plant and equipment for recoverability when events or changes in circumstances indicate that their carrying amount may not be recoverable. Circumstances applicable to our current stage of operations which could trigger a review include, but are not limited to: significant decreases in the market price of the asset; significant adverse changes in the business climate, legal or regulatory factors; accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of the asset; or expectations that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life. The carrying amount of a long-lived asset is considered to be impaired if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset.

We evaluated our Agri-Energy Facility for impairment as of December 31, 2013. This evaluation included comparing the carrying amount of the acquisition and Retrofit of the Agri-Energy Facility to the estimated undiscounted future cash flows at the Agri-Energy Facility as this represents the lowest level of identifiable cash flows. Significant assumptions included in the estimated undiscounted future cash flows include, among others, estimates of the:

sales price of isobutanol and by-products such as dried distiller's grains;
purchase price of corn;
production levels of isobutanol;
costs to produce isobutanol; and
estimated useful life of the primary asset.

Factors which can impact these assumptions include, but are not limited to;

effectiveness of yeast growth to produce isobutanol;
demand for isobutanol and oil prices; and
harvest levels of corn.

Based upon our evaluation at December 31, 2013, we concluded that the estimated undiscounted future cash flows from Agri-Energy exceeded the carrying value of the Agri-Energy Facility and, as such, these assets were not impaired. Although our cash flow forecasts are based on assumptions that are consistent with our planned use of the assets, these estimates required significant exercise of judgment and are subject to change in future reporting periods as facts and circumstances change. Additionally, we may make changes to our business plan that could result in changes to the expected cash flows. As a result, it is possible that a long- lived asset may be impaired in future reporting periods.

Stock-Based Compensation

Our stock-based compensation expense includes expenses associated with share-based awards granted to employees, board members, non-employees and expenses associated with our employee stock purchase plan ("ESPP"). The estimated fair value of stock options and ESPP awards is determined on the date of grant and recorded to expense over the requisite service period, generally the vesting period. We estimate the fair value of stock option awards using the Black-Scholes option-pricing model which requires judgments to be made, including estimating: (i) the expected life of an award; (ii) stock price volatility; and (iii) prior to our initial public offering in February 2011, estimating the fair value of our common stock.

The Black-Scholes option-pricing model calculates the estimated fair value of stock options using the following inputs: (i) expected stock option life; (ii) expected volatility; (iii) risk-free interest rate; (iv) expected dividend yield rate; (v) exercise price; and (vi) closing price of our common stock on the date of grant.

Due to our limited history of grant activity, we use the “simplified method” to estimate the expected stock option life permitted by the SEC as the arithmetic average of the total contractual term of the option and its vesting period. We calculate the estimated volatility rate based on selected comparable public companies, due to a lack of historical information regarding the volatility of our stock price. We will continue to analyze the historical stock price volatility assumption as more historical data for our common stock becomes available. The risk-free interest rate assumption is based on the U.S. Treasury yield curve in effect on the date of grant for instruments with a term similar to the expected life of the related option. No dividends are expected to be paid.

The estimated fair value of a stock option using the Black-Scholes option-pricing model is impacted significantly by changes in a company’s stock price. For example, all other assumptions being equal, the estimated fair value of a stock option will increase as the closing price of a company’s stock increases, and vice versa. Prior to the closing of our initial public offering, we were a private

company and, as such, we were required to estimate the fair value of our common stock. In the absence of a public trading market, we determined a reasonable estimate of the then-current fair value of our common stock for purposes of granting stock-based compensation based on multiple criteria. We determined the fair value of our common stock utilizing methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants Practice Aid, "Valuation of Privately-Held-Company Equity Securities Issued as Compensation." After the closing of our initial public offering in February 2011, the fair value of our common stock is no longer an estimate as it is based upon the closing price of our stock on the NASDAQ Global Market on the date of grant.

Revenue Recognition

Following consummation of the Agri-Energy acquisition in September 2010, we recorded revenue from the sale of ethanol and related products through commencement of startup isobutanol production in May 2012. We have not shipped significant quantities of ethanol and related products since May 2012. Revenue from the sale of ethanol, hydrocarbons or excess corn inventory is recognized when all of the following criteria are satisfied: persuasive evidence of an arrangement exists; risk of loss and title transfer to the customer; the price is fixed or determinable; and collectability is reasonably assured. Ethanol and related products are generally shipped free on board shipping point. Collectability of revenue is reasonably assured based on historical evidence of collectability between us and our customers.

Revenue related to our government research grants and cooperative agreements is recognized in the period during which the related costs are incurred or over the contract period, provided that the conditions under the awards have been met and only perfunctory obligations are outstanding.

Result of Operations

Comparison of the years ended December 31, 2013 and 2012 (in thousands)

	Years Ended December 31,		
	2013	2012	Change
Revenue and cost of goods sold			
Ethanol sales and related products, net	$-	$19,908	$(19,908)
Hydrocarbon revenue	2,157	650	1,507
Grant and other revenue	2,722	2,818	(96)
Corn sales	3,345	1,009	2,336
Total revenues	8,224	24,385	(16,161)
Cost of corn sales	3,391	918	2,473
Cost of goods sold	14,522	31,492	(16,970)
Gross loss	(9,689)	(8,025)	(1,664)
Operating expenses			
Research and development	20,179	19,431	748
Selling, general, administrative and other	25,647	43,981	(18,334)
Total operating expenses	45,826	63,412	(17,586)

Loss from operations	(55,515)	(71,437)	15,922
Other income			
Interest expense	(9,301)	(6,338)	(2,963)
Loss on extinguishment of debt	(2,038)	-	(2,038)
Gain from change in fair value of embedded derivatives	3,114	17,000	(13,886)
Other income	129	63	66
Loss from change in fair value of derivative warrant liability	(3,195)	-	(3,195)
Total other income (expense)	(11,291)	10,725	(22,016)
Net loss	$(66,806)	$(60,712)	$(6,094)

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Revenue. During the year ended December 31, 2013, we did not make any shipments or report any sales of ethanol as our focus during this period was on shipments of isobutanol for use at the demonstration plant located at South Hampton's facility near Houston, Texas to produce biojet fuel, optimizing specific parts of our technology to further enhance isobutanol production rates and resuming the limited production of isobutanol at our Agri-Energy Facility in single production train mode. During the year ended December 31, 2012, we generated revenue from the sale of ethanol and related products at our Agri-Energy Facility.

Hydrocarbon revenue increased during the year ended December 31, 2013 as we produced and shipped more biojet fuel to the U.S. military in 2013 compared with 2012. Included in grant and other revenue is revenue associated with research and development and government grant agreements. Corn sales during 2013 and 2012 relate to the sale of excess corn inventory on hand.

Cost of goods and corn sold. Our cost of goods and corn sold during the year ended December 31, 2013 primarily includes the following: (i) $11.9 million in startup costs and fixed production costs of our Agri-Energy Facility; (ii) $3.4 million associated with costs related to the sale of excess corn inventory; (iii) $2.1 million in depreciation expense; and (iv) $0.5 million in non-cash expenses associated with the write-down of our corn inventory and changes in the fair value of our corn forward contracts. Our cost of goods sold during the year ended December 31, 2012 primarily resulted from $22.0 million of costs related to the production of ethanol and distiller's grains. We also incurred $6.6 million of startup costs related to isobutanol production at our Agri-Energy Facility.

Research and development. Research and development expenses increased during the year ended December 31, 2013 primarily due to a $4.4 million increase in costs at the demonstration plant located at South Hampton's facility that were incurred to increase our biojet fuel processing capability, costs for the production of test quantities of biojet fuel for the U.S. Air Force, U.S. Army and U.S. Navy and the cost to establish a bio-PX demonstration plant under our agreement with Toray Industries. This was partially offset by the following decreases: (i) $1.5 million in costs associated with laboratory consultants and supplies; (ii) $1.4 million in salary and other compensation-related expenses; and (iii) $0.5 million associated with a license fee to Cargill that was incurred in 2012.

Selling, general, administrative and other. The decrease in selling, general, administrative and other expenses during the year ended December 31, 2013 primarily resulted from the following decreases: (i) $9.4 million in salary and compensation-related expenses, including $4.5 million associated with stock-based compensation; (ii) $6.2 million in legal-related expenses including expenses in support of our ongoing litigation with Butamax; (iii) $2.4 million in other general and administrative costs, including consulting, marketing and website advertising; and (iv) $0.8 million in travel-related expenses. This was partially offset by an increase of $0.7 million in public company-related expenses. Salary and compensation-related expenses for the year ended December 31, 2012 included severance related payments of $1.6 million and a $2.6 million expense resulting from the accelerated vesting of warrants due to the departure of three of our Executive Vice Presidents.

Interest expense. Interest expense increased during the year ended December 31, 2013 primarily resulting from increases of $0.7 million and $3.0 million related to cash interest and non-cash amortization of debt issue costs and discounts, respectively, associated with our Convertible Notes. This increase was partially offset by a decrease of $0.9 million in cash and non-cash interest expense primarily associated with the decline in the outstanding principal balance of our debt with TriplePoint due to scheduled payments on our principal balance. We also incurred $0.2 million of non-cash interest expense from the write-off of debt discounts and issue costs associated with the payoff of $5.1 million in principal to TriplePoint in December 2013.

Loss on conversion of debt. During the year ended December 31, 2013, holders of $18.1 million principal amount of Convertible Notes opted to convert their holdings into shares of our common stock. Upon conversion, the Convertible Note holders received 3,179,608 shares of our common stock in payment of converted principal and, pursuant to the

terms of the Indenture, the Convertible Note holders also received 2,957,775 shares of our common stock in settlement of Coupon Make-Whole Payments of $4.9 million. We recorded a loss on conversion of debt of $2.0 million as a result of the conversion of the Convertible Notes and settlement of the Coupon Make-Whole Payments.

Gain from change in fair value of embedded derivatives. During the year ended December 31, 2013, we reported a $3.1 million gain associated with the decrease in the fair value of derivatives embedded in our Convertible Notes primarily resulting from decreases in our stock price from December 31, 2012 to December 31, 2013. During the year ended December 31, 2012, we reported a $17.0 million gain associated with the decrease in the fair value of derivatives embedded in our Convertible Notes primarily resulting from a decline in the price of our common stock between the date that the Convertible Notes were issued and December 31, 2012.

Loss from change in fair value of derivative warrant liability. In December 2013, we issued Warrants to purchase our common stock which are recorded at fair value each reporting period. The increase in the estimated fair value of the Warrants between the date of issuance and December 31, 2013 represents an unrealized loss and was driven by an increase in the quoted market prices of the Warrants .

Comparison of the years ended December 31, 2012 and 2011 (in thousands)

	Years Ended December 31,		
	2012	2011	Change
Revenue and cost of goods sold			
Ethanol sales and related products, net	$19,908	$63,742	$(43,834)
Hydrocarbon revenue	650	-	650
Grant and other revenue	2,818		