

Gevo, Inc.  
Form 10-K  
March 29, 2011  
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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

WASHINGTON, DC 20549

**Form 10-K**

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the fiscal year ended December 31, 2010**

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)

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(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 ☒

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (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 ☐ 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. ☒

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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>

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

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 March 25, 2011 was approximately \$138 million. The registrant has provided this information as of March 25, 2011 because its common stock was not publicly traded as of the last business day of its most recently completed second fiscal quarter. 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 25, 2011 was 25,851,284.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of Part II of this Annual Report on Form 10-K and Items 10, 11, 12, 13 and 14 of Part III of this Annual Report on Form 10-K incorporate information by reference from the registrant's definitive proxy statement to be filed pursuant to Regulation 14A in connection with the registrant's 2011 Annual Meeting of Stockholders or an amendment to this Annual Report on Form 10-K to be filed with the Securities and Exchange Commission within 120 days after the close of the fiscal year covered by this Annual Report on Form 10-K.

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**GEVO, INC.**

**FORM 10-K ANNUAL REPORT**

**For the Fiscal Year Ended December 31, 2010**

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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 other 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 and our refer to Gevo, Inc. and its wholly owned or indirect subsidiaries, and their predecessors.

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 US Energy Information Association (the EIA), the International Energy Agency (the IEA), the Renewable Fuels Association (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. Although we believe the information in these industry publications, surveys and forecasts is reliable, we have not independently verified the accuracy or completeness of the 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 are based on data available for the year 2007 (the most current data available from SRI); and

volume data with respect to target market sizes is derived from data included in various industry publications, surveys and forecasts generated by SRI, CMAI, the EIA, the IEA and Nexant.

We have converted these 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;

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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 advanced biofuels company. Our strategy is to commercialize biobased alternatives to petroleum-based products using a combination of synthetic biology and chemical technology. In order to implement this strategy, we are taking a building block approach. We intend to produce and sell isobutanol, a four carbon alcohol. Isobutanol can be sold directly for use as a specialty chemical or a value-added fuel blendstock. It can also be converted into butenes using simple dehydration chemistry deployed in the refining and petrochemicals industries today. Butenes are primary hydrocarbon feedstocks that can be employed to create substitutes for the fossil fuels used in the production of plastics, fibers, rubber, other polymers and hydrocarbon fuels. Customer interest in our isobutanol is primarily driven by our low cost manufacturing route and isobutanol's potential to serve as a building block to produce alternative sources of raw materials for their products at competitive prices. We believe products made from biobased isobutanol will be subject to less cost volatility than the petroleum-derived products in use today. We believe that the products derived from isobutanol have potential applications in approximately 40% of the global petrochemicals market, representing a potential market for isobutanol of approximately 67 billion gallons per year ( BGPY ), based upon volume data from SRI, CMAI and Nexant, and substantially all of the global hydrocarbon fuels market, representing a potential market for isobutanol of approximately 900 BGPY, based upon volume data from the IEA. When combined with a potential specialty chemical market for isobutanol of approximately 1.1 BGPY, based upon volume data from SRI, and a potential fuel blendstock market for isobutanol of approximately 40 BGPY, based upon data from the IEA, the potential global market for isobutanol is approximately 1,008 BGPY.

We also believe that the raw materials produced from our isobutanol will be drop-in products, which means that customers will be able to replace petroleum-derived raw materials with isobutanol-derived raw materials without modification to their equipment or production processes. In addition, the final products produced from our isobutanol-based raw materials will be chemically identical to those produced from petroleum-based raw materials, except that they will contain carbon from renewable sources. 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, because the infrastructure and applications for such products already exist.

In order to produce and sell isobutanol made from renewable sources, we have developed the Gevo Integrated Fermentation Technology<sup>®</sup>, or GIFT<sup>®</sup>, an integrated technology platform for the efficient production and separation of isobutanol. GIFT<sup>®</sup> consists of two components, proprietary biocatalysts which convert sugars derived from multiple renewable feedstocks into isobutanol through fermentation, and a proprietary separation unit which is designed to continuously separate isobutanol from water during the fermentation process. We developed our technology platform to be compatible with the existing approximately 20 BGPY of global operating ethanol production capacity, as estimated by the RFA. GIFT<sup>®</sup> is designed to allow relatively low capital expenditure retrofits of existing ethanol facilities, enabling a rapid and cost-efficient route to isobutanol production from the fermentation of renewable feedstocks. While we are a development stage company that has generated limited revenue from ethanol sales and government research grants, neither of which is our intended primary business, and have experienced net losses since inception, we believe that our cost-efficient production route will enable rapid deployment of our technology platform and allow our isobutanol and the products produced from it to be economically competitive with many of the petroleum-derived products used in the chemicals and fuels markets today.

We expect that the combination of our efficient proprietary technology, our marketing focus on providing substitutes for the raw materials of well-known and widely used products and our relatively low capital investment retrofit approach will mitigate many of the historical issues associated with the commercialization of renewable chemicals and fuels.

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### **Our Markets**

Relative to petroleum-based products, we expect that chemicals and fuels made from our isobutanol will provide our potential customers with the advantages of lower cost volatility and increased supply options for their raw materials. While we intend to focus on producing and marketing isobutanol, the demand for our product is driven in large part by the fact that our isobutanol can be converted into a number of valuable hydrocarbons, providing us with multiple sources of potential demand. We anticipate that additional uses of our isobutanol will develop rapidly because the technology to convert isobutanol into hydrocarbon products is known and practiced in the chemicals industry today.

#### ***Isobutanol for direct use.***

Without any modification, isobutanol has applications as a specialty chemical. Chemical-grade isobutanol can be used as a solvent and chemical intermediate.

Isobutanol also has direct applications as a specialty fuel blendstock. Fuel-grade isobutanol may be used as a high energy content, low Reid Vapor Pressure ( RVP ), gasoline blendstock and oxygenate, which we believe, based on its low water solubility, will be compatible with existing refinery infrastructure, allowing for blending at the refinery rather than blending at the terminal. RVP measures a fuel's volatility, and in warm weather, high RVP fuel contributes to smog formation. Additionally, fuel-grade isobutanol can be blended in conjunction with, or as a substitute for, ethanol and other widely used fuel oxygenates.

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 lower risk profile and produce attractive margins.

***Isobutanol for the production of plastics, fibers, rubber and other polymers.*** Isobutanol can be dehydrated to produce butenes which have many industrial uses in the production of plastics, fibers, rubber and other polymers. The straightforward conversion of isobutanol into butenes is a fundamentally important process that enables isobutanol to be used as a building block chemical in multiple markets.

Isobutanol can be converted into hydrocarbons which form the basis for the production of rubber, lubricants and additives for use predominantly in the automotive markets. Based on conversations between our officers and these producers and an SRI study, we believe producers in these markets are looking for new sources of drop-in hydrocarbons.

Isobutanol can also be converted into methyl methacrylate ( MMA ) which is used to produce plastics and industrial coatings for use in consumer electronics and automotive markets. Based on conversations between our officers and these producers and multiple market studies, we believe producers of MMA are looking for new sources of raw materials.

Propylenes used in packaging, fibers and automotive markets may also be made from isobutanol. Based on conversations between our officers and these producers, an article in ICIS Chemical Business and multiple market studies, we believe producers of propylenes are looking to find new sources of raw materials and biobased alternatives that will allow them to market their products as environmentally friendly.

Isobutanol can also be used to produce para-xylene and its derivatives, including polyesters, which are used in the beverage and food packaging and fibers markets. Based on conversations between our officers and these producers, multiple news articles and producer press releases, we believe producers of these products are looking to find biobased alternatives that will allow them to market their products as environmentally friendly.

Styrene and polystyrene can also be made from isobutanol for use in food packaging. Based on conversations between our officers and these producers, producer press releases and a CMAI presentation, we believe producers of these products are looking to find



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biobased alternatives that will allow them to market their products as environmentally friendly.

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***Isobutanol for the production of hydrocarbon fuels and specialty blendstocks.*** Beyond direct use as a fuel additive, isobutanol can be converted into many hydrocarbon fuels and specialty blendstocks, offering substantial potential for additional demand.

Isobutanol may be converted into isooctane, which is valuable, particularly in low vapor pressure markets like California, for reducing gasoline's RVP and increasing its octane rating. Compared to alkylate, which is currently used to reduce vapor pressure, isooctane has a lower vapor pressure and higher octane rating. Renewable isooctane produced from our isobutanol would give refiners an additional option to meet their renewable volume obligations set by the US Environmental Protection Agency (EPA) in a cost effective way. Isooctane produced from biobased isobutanol may also be blended with isobutanol and low value gasoline components to create gasoline with a high percentage renewable content.

We have demonstrated the conversion of our isobutanol into a renewable jet fuel blendstock which meets current ASTM International (ASTM) and US military synthetic jet fuel blendstock performance and purity requirements, and we are working to obtain an ASTM standard specification for the use of such jet fuel blendstock in commercial aviation. Commercial airlines are currently looking to form strategic alliances with biofuels companies to meet their supply demands.

Diesel fuel may also be produced from our isobutanol.

### **Our Retrofit Strategy**

We plan to commercialize our isobutanol for direct use as a solvent and gasoline blendstock and for use in the production of plastics, fibers, rubber, other polymers and hydrocarbon fuels derived from renewable feedstocks instead of petroleum. Our strategy of retrofitting existing ethanol production facilities to produce isobutanol allows us to project substantially lower capital outlays and a faster commercial deployment schedule than the construction of new plants. We developed our technology platform to be compatible with the existing approximately 20 BGPY of global operating ethanol production capacity and we believe that this retrofit approach will allow us to rapidly expand our isobutanol production capacity in response to customer demand. We believe our isobutanol not only offers a compelling value proposition to customers in the chemicals and fuels markets, but should also provide current ethanol plant owners with an opportunity to increase their operating margins through the retrofit of their existing facilities in joint venture settings. Additionally, the ability of GIFT® to convert sugars from multiple renewable feedstocks into isobutanol will enable us to leverage the abundant domestic sources of 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 US.

Through our exclusive alliance with ICM, Inc. (ICM), a leading engineering firm that has designed approximately 60% of current US operating ethanol production capacity, which the RFA estimates to be over 12 BGPY, we are developing our retrofit equipment package and have successfully demonstrated the production of isobutanol via the retrofit of a 1 million gallon per year (MGPY) ethanol demonstration facility in St. Joseph, Missouri using our first- and second- generation biocatalysts. We plan to secure access to existing ethanol production facilities through joint ventures and direct acquisitions. We will then work with ICM to deploy GIFT® through retrofit of these production facilities. In partnership with ICM, we have developed retrofit equipment packages for the retrofit of standard 50 MGPY and 100 MGPY ICM-designed corn ethanol plants.

In September 2010, we acquired a 22 MGPY ethanol production facility in Luverne, Minnesota. We have begun the project engineering and permitting portion of the Agri-Energy facility retrofit process. The Agri-Energy facility is a traditional dry-mill facility, which means that it uses dry-milled corn as a feedstock. Based on an initial evaluation of the Agri-Energy facility by ICM, we project capital costs of approximately \$17 million to retrofit this plant to produce 18 MGPY of isobutanol. We expect to incur additional costs of approximately \$5 million related to, among other things, the construction of equipment and storage tanks designed to allow switching between isobutanol and ethanol production and conservative engineering estimates made in

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acknowledgment that the Agri-Energy facility will be our first commercial retrofit, bringing the total projected cost to approximately \$22 million. We expect to begin commercial production of isobutanol at the Agri-Energy facility in the first half of 2012.

Additionally, in November 2010, we executed a non-binding letter of intent with a large ethanol producer in the Midwest. This letter of intent contemplates a joint venture between this ethanol producer and us pursuant to which the ethanol producer would provide its existing 50 MGPY gallon ethanol production facility and we would be responsible for retrofitting such facility to produce isobutanol. Upon completion of the retrofit, both parties to the joint venture would receive a portion of the profits from the sale of isobutanol, consistent with our business model. However, there can be no assurance that we will be able to enter into a definitive joint venture agreement with this ethanol producer.

We are currently in discussions with several other ethanol plant owners that have expressed an interest in either entering into joint ventures or selling their facilities to us for retrofit to produce isobutanol. Collectively, these ethanol plant owners represent over 2.4 BGPY of ethanol capacity. However, there can be no assurance that we will be able to acquire access to ethanol plants from these owners.

### **Production and Distribution**

We plan to commence commercial production of isobutanol in the first half of 2012 at our acquired facility in Luverne, Minnesota. We expect our production to be targeted to ready markets, for use as a specialty chemical, and to regional fuel blendstock markets in the US that value isobutanol's low RVP and higher energy content as compared to ethanol.

During the retrofit of the Agri-Energy facility, we intend to continue to produce and sell ethanol and related distiller's grains. Following retrofit of the facility to isobutanol production, we intend to produce and sell isobutanol to customers and to sell protein fermentation meal as animal feed for local markets in the same manner as distiller's grains are sold today.

As our customers place processing assets into service, we plan to transition to selling increased isobutanol volumes under direct customer relationships, many of which we have already established. We are developing a pipeline of future customers for our isobutanol and its derivative chemical products across multiple target chemicals and fuels markets both in the US and internationally. As of December 31, 2010, we have entered into the following arrangements:

**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 million gallons of our isobutanol per year 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. This pricing mechanism is appealing to LANXESS due to the lower historical price volatility of the resulting butanol, as compared to their traditional petroleum-based feedstocks. This pricing mechanism also allows us to enter into long-term supply agreements for our isobutanol. In January 2011, we also entered into an exclusive supply agreement 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. Our exclusive first right to supply biobased isobutanol to LANXESS and its affiliates will be subject to the terms of the future supply agreement that we intend to enter into with LANXESS, as described above.

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**TOTAL PETROCHEMICALS.** In February 2010, we entered into a non-binding letter of intent with TOTAL PETROCHEMICALS USA, Inc. ( TOTAL PETROCHEMICALS ), an affiliate of TOTAL S.A., a major oil and gas integrated company. Under the terms of the letter of intent, we have agreed to negotiate a definitive supply agreement, for a term of up to five years, for the sale of a specified amount of isobutanol to TOTAL PETROCHEMICALS for use as a second-generation biofuel. TOTAL PETROCHEMICALS anticipates that it will require a volume of isobutanol ranging from 5 to 10 million gallons during the first year of the agreement. After the first year, the parties will mutually agree upon a ramp-up schedule to increase the annual volume of isobutanol to be supplied by us over the remaining term of the agreement. TOTAL PETROCHEMICALS is affiliated with one of our stockholders, Total Energy Ventures International.

**Toray Industries.** In April 2010, we received a non-binding letter of interest from Toray Industries, Inc. ( Toray Industries ), a leader in the development of fibers, plastics and chemicals. Under the terms of the letter of interest, the parties have agreed to negotiate a supply agreement, pursuant to which, beginning on or after 2012, Toray Industries would purchase 1,000 metric tons per year of biobased p-xylene made from our isobutanol, potentially building to 5,000 metric tons within five years. Production of 5,000 metric tons of p-xylene is expected to require approximately 2.3 million gallons of isobutanol. We believe that the p-xylene can be produced by third-party manufacturers using isobutanol. We intend to solicit commitments from these manufacturers to purchase our isobutanol in order to supply Toray Industries.

**United Airlines.** In July 2010, we entered into a non-binding letter of intent with United Air Lines, Inc. ( United Airlines ), one of the largest international airlines in the world. This letter of intent sets forth the initial terms for a supply agreement for renewable jet fuel, produced from our isobutanol, to serve United Airlines' major hub airport in Chicago. We anticipate that the quantity of renewable jet fuel provided to the hub airport in Chicago will initially be 10,000 barrels per day, beginning in the fourth quarter of 2012. The production of this quantity of renewable jet fuel will require approximately 205 MGPY of isobutanol. The letter of intent also contemplates a ramp-up in the supply of renewable jet fuel to 30,000 barrels per day by 2015 and 60,000 barrels per day by 2020. Importantly, the pricing of the renewable jet fuel will be indexed to the cost of corn, the feedstock that we will use to produce our isobutanol, and natural gas.

**Sasol Chemical Industries.** In November 2010, we entered into a non-binding letter of intent with Sasol Chemical Industries Ltd. ( Sasol ), acting through its Solvents Division. This letter of intent sets forth the proposed initial terms of a possible sales and distribution agreement for our isobutanol for use as a solvent or as a chemical feedstock to downstream processes. Under the terms of the letter of intent, the parties intend to negotiate a definitive sales and distribution agreement that will have an initial term of three years, with the initial shipment of isobutanol expected to occur in the first half of 2012. The letter of intent proposes that, subject to entering into a definitive sales and distribution agreement, Sasol would purchase and distribute 40,000 tons of our isobutanol in 2012, and would purchase and distribute 60,000 to 80,000 tons each year thereafter, with an option to purchase and distribute additional volume should we develop additional isobutanol production capacity.

To facilitate our entry into the jet fuels market, we are currently engaged in discussions facilitated by the Air Transport Association of America ( ATA ), with several major passenger and cargo airlines in order to secure commitments from the ATA member airlines to purchase significant quantities of renewable jet fuel made from our isobutanol once the proper standard specifications have been developed and obtained. To serve this market, we are also in discussions with major refiners to produce renewable jet fuel using our isobutanol at their refineries. For example, in May 2010 we received an expression of interest from a major US oil refiner and marketer that is interested in evaluating the suitability and economics of using our isobutanol to produce biobased kerosene as a renewable jet fuel blendstock. This expression of interest, which is subject to ongoing discussions with potential airline customers, among other things, contemplates an initial term of at least five years and an initial volume of renewable jet fuel of up to 300 MGPY, up to 50% of which would be kerosene produced from our isobutanol. We intend to develop relationships with companies that are engineering and piloting the processes necessary to convert isobutanol to biobased jet fuel.

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To further facilitate our entry into the markets for butenes and hydrocarbon products such as jet fuel, we are currently engaged in discussions with numerous petrochemical manufacturers that have the ability to produce these products from our isobutanol. If we are successful in entering into arrangements with petrochemical manufacturers, we would either sell isobutanol to them directly or work with them on a contract or toll processing basis to produce the butenes and other hydrocarbon products needed to satisfy the demands of our future customers. In November 2010, we entered into a non-binding letter of intent with South Hampton Resources, Inc. ( "SHR" ), an independent specialty petrochemical manufacturer with over 50 years of experience in toll processing and product development, pursuant to which SHR will develop processes to dehydrate our isobutanol into isobutylene to serve the market for isobutylenes, and will further process at least a portion of that isobutylene to produce kerosene for use as a renewable jet fuel blendstock. This letter of intent contemplates an initial production capacity of 2,000 barrels per day of kerosene produced from our isobutanol for a two to three year timeframe, beginning in 2012. We believe that our relationships with SHR and other petrochemical manufacturers will enable us to access the infrastructure necessary to produce hydrocarbon products from our isobutanol to meet the demands of our future customers. However, there can be no assurance that we will be able to enter into a definitive agreement with SHR, or any other petrochemical manufacturer.

We have also secured a non-binding development and marketing commitment from Catalytic Distillation Technologies ( "CDTECH" ), a leading hydrocarbon technology provider for the petrochemical and refining industry. We believe that our relationship with CDTECH will accelerate the growth of a broader market for downstream applications of our isobutanol. In addition, we are actively pursuing commercial relationships with petrochemical companies and large brand owners for the production of biobased plastics.

We anticipate that isobutanol will have a higher price than ethanol because of the higher value markets that isobutanol can serve. We have also been successful in including pricing mechanisms which are linked to the cost of feedstocks in our letters of intent. These pricing mechanisms result in lower price volatility for our customers, as compared to supply agreements for petroleum-based raw materials, and allow us to reduce the risk of entering into long-term supply agreements for our isobutanol. We believe that our ability to enter into long-term agreements for the supply of isobutanol, with customer pricing linked to the cost of feedstocks, provides us with an advantage over current ethanol marketing agreements.

Although we have agreed to preliminary terms with each of the potential customers discussed above, none of these agreements, except for the exclusive supply agreement with LANXESS, are binding and there can be no assurance that we will be able to enter into definitive supply agreements with any of these potential customers, 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 the butenes produced from our isobutanol will serve as renewable alternatives for the production of plastics, fibers, rubber and other polymers which comprise approximately 40% of the global petrochemicals market, and will have potential applications in substantially all of the global hydrocarbon fuels market, enabling our customers to reduce raw material cost volatility, diversify suppliers and improve feedstock security. We believe that we will face reduced market adoption barriers because products derived from our isobutanol are chemically identical to petroleum-derived products, except that they will contain carbon from renewable sources.

***Proprietary, low cost technology with global applications.*** We believe that GIFT® is currently the only known biological process to produce isobutanol cost-effectively from renewable carbohydrate sources, which will enable the economic production of hydrocarbon derivatives of isobutanol. Our proprietary separation unit is designed to achieve superior energy efficiency in comparison to other known separation processes for isobutanol and, as a result, reduces energy consumption costs the second

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largest operating cost component of isobutanol production. Both our first- and second- generation biocatalysts are able to achieve a product yield on sugar of approximately 94% of theoretical maximum by weight, which is near to, if not the maximum practical yield attainable from fermentable sugars. Collectively, we believe that these attributes, coupled with our ability to leverage the existing ethanol production infrastructure, will create a low capital cost route to isobutanol. Furthermore, we believe that our low cost production route will allow 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.*** We have designed GIFT® to enable capital-light retrofits of existing ethanol facilities, which allows us to leverage the existing approximately 20 BGPY of global operating ethanol production capacity. Our retrofit strategy supports a rapid and low capital cost route to isobutanol production. Based on a study completed by ICM in May 2010, we expect that the retrofit of an ICM-designed corn ethanol plant can be completed in approximately 14 months at a cost of approximately \$22 to \$24 million, within a forecast confidence interval, for a standard 50 MGPY plant and approximately \$40 to 45 million for a standard 100 MGPY plant. These projected retrofit capital expenditures are substantially less than estimates for new plant construction for the production of advanced biofuels, including cellulosic ethanol. Based on an initial evaluation of the Agri-Energy facility by ICM, we project capital costs of approximately \$17 million to retrofit this plant to produce 18 MGPY of isobutanol. We expect to incur additional costs of approximately \$5 million related to, among other things, the construction of equipment and storage tanks designed to allow switching between isobutanol and ethanol production and conservative engineering estimates made in acknowledgment that the Agri-Energy facility will be our first commercial retrofit, bringing the total projected cost to approximately \$22 million. Notably, our calculations based on expected costs of retrofit, operating costs, volume of isobutanol production and price of isobutanol suggest that GIFT® retrofits will result in an approximate two-year payback period on the capital invested in the retrofit. We have also designed our production technology to minimize the disruption of ethanol production during the retrofit process, mitigating the costs associated with downtime as the plant is modified. Following an ICM-estimated two-week period to transition to isobutanol production, we expect the original plant to operate in essentially the same manner as it did prior to the retrofit, producing a primary product (isobutanol) and a co-product (protein fermentation meal as an animal feed). We intend to seek the necessary regulatory approvals to permit us to market our co-product as an animal feed, which will allow us to recover a significant portion of our feedstock costs. Where we retrofit wet-milled plants, we will instead extract high-value feedstock co-products such as corn gluten meal, corn oil and corn gluten animal feed before fermentation, which can likewise be marketed to defray feedstock costs.

***GIFT® demonstrated at commercially relevant scale.*** We have completed the retrofit of a 1 MGPY ethanol facility in St. Joseph, Missouri with our proprietary engineering package designed in partnership with ICM. During September 2009, we successfully produced isobutanol at this facility using our first-generation biocatalyst, achieving our commercial targets for concentration, yield and productivity, which are consistent with the current yeast performance observed in a grain ethanol plant. During the fourth quarter of 2010, we used this facility to successfully produce isobutanol using our second-generation biocatalyst. These operations also demonstrated the effectiveness of our proprietary technology, confirming the fermentation performance of our biocatalyst technology and our ability to effectively separate isobutanol from water as it is produced. Also, we believe that our acquisition of the 22 MGPY Agri-Energy ethanol production facility demonstrates the readiness of our technology for commercial deployment and supports our plan to commence initial commercial-scale isobutanol production in the first half of 2012.

***Strategic relationships with chemicals, fuels and engineering industry leaders.*** We have entered into strategic relationships with global industry leaders to accelerate the execution of our commercial deployment strategy both in the US and internationally. To facilitate the adoption of our technology at

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existing ethanol plants, we have entered into an exclusive alliance with ICM. We expect our relationships with customers such as TOTAL PETROCHEMICALS, LANXESS, Toray Industries and United Airlines to contribute to the development of new chemical and fuel market applications of our isobutanol. Meanwhile, we expect to take advantage of the current markets for isobutanol by forming relationships and negotiating supply and distribution agreements with potential customers and distributors such as Sasol. To enable the 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 the GIFT<sup>®</sup> System. To accelerate the adoption of isobutanol as a platform molecule, we have secured a non-binding development and marketing commitment from CDTECH. Finally, in order to support the development of biobased fuels, we intend to develop relationships with companies that are engineering and piloting the processes necessary to convert isobutanol to biobased jet fuel. A number of our strategic partners are also stockholders of our company.

***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 450 combined years of biotechnology, synthetic biology and biobased product experience. Our employees have generated over 300 patent and patent application authorships 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 deep experience, members of our management team play important roles in the industrial biotechnology industry at US 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<sup>®</sup> is designed to allow for relatively low capital expenditure retrofits of existing ethanol facilities, enabling a rapid and cost-efficient route to isobutanol production. GIFT<sup>®</sup> 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. A commercial engineering study completed by ICM in May 2010 projected the capital costs associated with the retrofit of a standard 50 MGPY ICM-designed corn ethanol plant to be approximately \$22 to \$24 million, within a forecast confidence interval, and estimated the capital costs associated with the retrofit of a standard 100 MGPY ICM-designed corn ethanol plant to be approximately \$40 to \$45 million. The ICM study also projected that each GIFT<sup>®</sup> retrofit would take approximately 14 months to complete, including completion of the relevant regulatory approval process. Individual ethanol plant retrofits could vary from these estimates based on the design of the underlying ethanol plant and the regulatory jurisdiction the plant operates in, among other factors. We have designed our production technology to minimize the disruption of ethanol production during the retrofit process, mitigating the costs associated with downtime as the plant is modified. Following an estimated two-week period to transition to isobutanol production, we expect the corn ethanol facility will be able to produce isobutanol, as well as protein fermentation meal as an animal feed co-product, while operating in substantially the same manner as it did prior to the retrofit.

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. This continuity reduces 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.

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We intend to process the spent grain mash from our fermentors to produce protein fermentation meal, relying on established processes in the current ethanol industry. We anticipate approval of our protein fermentation meal by the US Food and Drug Administration ( FDA ), and we plan to market it to the dairy, beef, swine and poultry industries as a high-protein, high-energy animal feed. Protein fermentation meal can also be sold for use as a boiler fuel, fertilizer and weed inhibitor. We believe that our sales of protein fermentation meal will allow us to offset a significant portion of our grain feedstock costs, as is practiced by the corn-based ethanol industry today. Where we instead retrofit an ethanol plant that uses wet-milled corn, we will not produce protein grains post-fermentation, but will instead extract valuable proteins pre-fermentation, which we can sell as animal feed without the need for FDA approval.

## **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 first- and second-generation biocatalysts, we have already demonstrated that we can produce isobutanol at key commercial parameters, validating our biotechnology pathways and efficiencies. Our second-generation biocatalyst is a yeast, which 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 US, as we seek to retrofit available ethanol production facilities 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 yeast 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). Our second- and future-generation biocatalysts are built upon robust industrial varieties of yeast that are widely used in large-scale fermentation processes, such as ethanol and lactic acid production. We have carefully selected our yeast 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 first-generation biocatalyst capable of producing biobased isobutanol. We chose to use *E. coli* as the bacteria in our first-generation 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 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 without producing 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



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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, with yield losses being accounted for mostly by cell production and metabolic energy (organism sustaining energy). 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. Matching this level of performance is important because doing so allows GIFT® fermentation to be performed in most existing grain ethanol fermentors 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.

### **Demonstrated Biocatalyst Performance**

By August 2009, our first-generation biocatalyst's performance was equal to or exceeded our targeted levels of commercial performance, defined as 48 to 72 hours fermentation time and a product yield of approximately 94% of the theoretical yield of isobutanol from the sugar in the feedstock. We initially achieved these fermentation performance goals with our first-generation biocatalyst at our GIFT® mini-plant. In September 2009, we replicated this performance in a retrofit 1 MGPY ethanol demonstration facility located at ICM's St. Joseph, Missouri site.

We have completed the transfer of our proprietary isobutanol pathway to an industrially relevant yeast host and have achieved our commercial performance targets in our GIFT® mini-plant. Yeast is the preferred host for low cost industrial fermentation because it is industrially proven for biofuels production, capable of out-competing bacteria, and is not susceptible to bacteriophage, a common problem for bacterial fermentations. Our yeast has been specifically selected and developed for its performance in the GIFT® process, which will allow for lower cost isobutanol production.

As of October 2010, our second-generation biocatalyst has achieved a fermentation time of 52 hours and achieved approximately 94% of the theoretical maximum yield of isobutanol from feedstock, meeting our targeted fermentation performance criteria well in advance of our planned commercial launch of isobutanol production in the first half of 2012.

### **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 first- and second-generation 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. We believe our second-generation biocatalyst will have the ability to convert these sugars into isobutanol at a commercial scale. The vast majority of fuel ethanol currently produced in the US is produced from corn feedstock, which is abundant, according to data from the US 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 also developing a future-generation yeast biocatalyst that is specifically designed to efficiently produce isobutanol from mixed sugars derived from cellulosic sources including purpose grown energy crops, agricultural residues, forest residues and municipal green waste. This yeast is highly hydrolyzate-tolerant and employs Cargill's technology for mixed sugar conversion. We expect that our feedstock flexibility

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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 GIFT® fermentation and recovery system provides enhanced fermentation performance as well as low cost, energy-efficient recovery of isobutanol and other alcohols. The GIFT® system enables inexpensive, 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 valuable 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 fermentor, thereby reducing the time to complete the fermentation. Using our first- and second-generation 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 fermentors thereby reducing capital expenditures. Finally, the GIFT® separation of isobutanol reduces natural gas costs per unit of energy in the fermented product (relative to conversion into ethanol), thereby reducing energy consumption and costs incurred for distillation, relative to ethanol production. We have designed a proprietary engineering package in partnership with ICM to carry out our isobutanol fermentation and recovery process, and this equipment has been successfully deployed via the retrofit of a 1 MGPY corn ethanol demonstration facility in St. Joseph, Missouri.

GIFT® requires little 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 (protein fermentation meal) are recovered and stored. GIFT® main modifications are replacing the ethanol biocatalyst with Gevo's proprietary isobutanol producing biocatalyst, and adding low temperature distillation 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, rubber, 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, 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 from petroleum is not cost-competitive with other petrochemical processes for generation of butenes, but we and our potential customers believe that our efficient and low cost fermentation technology for producing isobutanol will promote commercial isobutanol dehydration and provide us with the opportunity to access the hydrocarbon markets. In order to reach these markets, we have already started to develop relationships with companies that are engineering and piloting the processes necessary to convert isobutanol to biobased jet fuel, and we intend to continue to work with such companies to promote the use of isobutanol as a hydrocarbon feedstock.

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### **Milestones Achieved and Commercialization Roadmap**

***GIFT® developed in mini-plant and pilot plant.*** In 2008, we utilized a 10,000 gallon per year pilot plant to prove that our biocatalysts could function in our low temperature distillation process. Additionally in 2008, we developed bench- and pilot-scale bioreactors (containers in which biological reactions occur) to demonstrate and test our GIFT® biocatalyst and process at our Englewood, Colorado facility. The bench-scale bioreactor, referred to as our mini-plant, was engineered to utilize a two liter fermentor on a bench top and allowed for fermentation and simultaneous recovery utilizing GIFT®. The mini-plant confirmed that GIFT® enhances fermentation and recovers isobutanol as expected. We met our commercial fermentation performance targets with our first-generation biocatalyst in mid-2009 on the basis of GIFT® performance in our mini-plant.

***Design and operation of demonstration facility.*** In 2008, we began our ramp-up to commercial scale production when we formed an exclusive alliance with ICM to jointly develop a proprietary design for retrofitting an ethanol plant for the production of isobutanol using GIFT®. The proprietary retrofit design was then implemented at ICM's 1 MGPY ethanol demonstration facility in St. Joseph, Missouri. The initial retrofit design, procurement and construction were completed in August 2009. By the end of September 2009, we had operated the demonstration plant facility and successfully produced isobutanol at commercial fermentation performance levels using our first-generation biocatalyst. During the fourth quarter of 2010, we used this facility to successfully produce isobutanol using our second-generation biocatalyst.

***Engineering scale-up.*** We formed an exclusive alliance with ICM in 2008 to develop and commercialize our technology. ICM is widely regarded as the leading engineering and design firm for grain ethanol plants, and its designs account for an estimated 60% of the current operating ethanol plant capacity in the US. ICM has agreed to work exclusively with us on the production of butanols (including isobutanol), pentanols and propanols in existing and future ICM-engineered plants utilizing any sugar fermentation technology globally.

***Commercial engineering study completed.*** In 2010, we completed a commercial engineering study in conjunction with ICM evaluating the equipment and resources required to retrofit standard ICM-designed 50 MGPY and 100 MGPY corn ethanol facilities to produce isobutanol using GIFT®. The study was conducted to confirm capital and operating cost estimates for ethanol plant retrofits to produce isobutanol for use in commercialization planning and to facilitate the design process for identified facilities. The study estimated the capital costs associated with the retrofit of a standard 50 MGPY ICM-designed corn ethanol plant to be approximately \$22 to \$24 million, within a forecast confidence interval, and estimated the capital costs associated with the retrofit of a standard 100 MGPY ICM-designed corn ethanol plant to be approximately \$40 to \$45 million. The study also reviewed a number of engineering options for retrofitting an ethanol facility, including the potential ability to reverse the retrofit to switch between ethanol and isobutanol production, which was estimated to cost an additional approximately \$2 to \$3 million depending on the size of the facility, and the addition of a seed train to produce sufficient quantities of our biocatalyst without need for a yeast seed production contract, which was estimated to cost an additional approximately \$2 to \$4 million depending on the size of the facility. Additionally, when we acquire access to facilities that use non-ICM-based technology, we may incur further costs to upgrade such plants for our technology design and improve the efficiency of their operations. Once a retrofit has been completed, we expect our total operating costs to be comparable to, or even lower than, those of a traditional ethanol production facility.

Based on an initial evaluation of the Agri-Energy facility by ICM, we project capital costs of approximately \$17 million to retrofit this plant to produce 18 MGPY of isobutanol. We expect to incur additional costs of approximately \$5 million related to, among other things, the construction of equipment and storage tanks designed to allow switching between isobutanol and ethanol production and conservative engineering estimates made in acknowledgment that the Agri-Energy facility will be our first commercial retrofit, bringing the total projected cost to approximately \$22 million.

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### **Our Strategy**

Our strategy is to commercialize our isobutanol for use directly as a specialty chemical and low RVP fuel blendstock and for conversion into plastics, fibers, rubber, 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. We have begun the project engineering and permitting portion of the Agri-Energy facility retrofit process and expect to commence commercial production of approximately 18 MGPY of isobutanol at the Agri-Energy facility in the first half of 2012.

***Enter into supply agreements with customers to support capacity growth.*** We intend to transition the letters of intent that we have already received into firm supply agreements, and then 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 US and internationally.

***Expand our production capacity via retrofit of additional existing ethanol facilities.*** As we secure supply agreements with customers, we plan to acquire or gain access to additional and larger scale ethanol facilities via joint ventures and acquisitions. We believe that our exclusive alliance with ICM will enhance our ability to rapidly deploy our technology on a commercial scale at these facilities. We plan to acquire additional production capacity to enable us to produce and sell over 350 million gallons of isobutanol in 2015.

***Expand adoption of our isobutanol across multiple applications and markets.*** We intend to drive adoption of our isobutanol in multiple US 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.*** 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 recently entered into a letter of intent with United Airlines to purchase significant quantities of renewable jet fuel made from our isobutanol. We intend to use these commitments 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 renewable jet fuel.

***Incorporate additional feedstocks into our isobutanol production facilities.*** Our second-generation biocatalyst can produce isobutanol from any fuel ethanol feedstock currently in commercial use, including grains (e.g., corn, wheat, sorghum and barley) and sugar cane. While our initial focus is to access corn ethanol facilities in the US, the ability of our biocatalyst to produce isobutanol from multiple feedstocks will support our future efforts to expand production of isobutanol 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. We believe that this future-generation biocatalyst 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 2008 estimated at \$3 trillion based on data from the IEA and the EIA. Today's organic chemicals and fuels are predominantly 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



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volatility and the changing regulatory framework in the US 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 attractive costs. Based on our compilation of data from SRI, 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 drop-in solutions for existing 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 ethanol plants, numerous ethanol companies have faced limited expansion or 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 rely heavily on government subsidies. In the absence of governmental support, these alternatives face significant operational hurdles and are often no longer economically viable.

### **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 manufacture than petroleum isobutanol.*** We believe our biobased route to manufacture isobutanol is significantly lower cost than the predominant route to manufacture petroleum-based isobutanol. This allows 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 price will enable the development of new uses for isobutanol as a gasoline blendstock and as a building block for a variety of derivatives and hydrocarbon products.

***Low cost convertibility of renewable feedstocks into specialty chemicals and fuels.*** We believe our proprietary technology platform will enable rapid deployment and a low capital cost route to isobutanol and currently represents the only known biological process to produce isobutanol cost-effectively from the fermentation of renewable feedstocks. Isobutanol is a highly flexible platform molecule with broad applications in the chemicals and fuels markets.

***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. These include ethyl tert-butyl ether ( ETBE ), for use as a value-added gasoline blendstock, propylene, MMA, for use in plastics, industrial coatings and other chemical additives, such as antioxidants and plastics modifiers. The prevailing process to manufacture these hydrocarbon products today is through the practice of cracking oil and natural gas. Ethylene crackers produce butenes as a co-product and the butenes market has tightened as these crackers have shut down and shifted 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.

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***Feedstock flexibility.*** We believe our second-generation biocatalyst will produce isobutanol cost-effectively at a commercial scale from any feedstock currently used to produce grain ethanol. Additionally, this biocatalyst provides the ability to convert sugar cane into isobutanol which provides us with opportunities to expand our production into Brazil and other areas with sugar cane ethanol facilities. Moreover, our work with Cargill to develop a future-generation yeast 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 can not be transported via pipelines. Initial test results from DNV Columbus, Inc., a well-respected 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, pending necessary regulatory approval, we believe our isobutanol can be combined with ethanol to increase the benefits associated with using ethanol as a fuel blendstock. Therefore, we believe 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 believe a pathway could be defined with the EPA for our isobutanol to be classified as an advanced biofuel according to the Renewable Fuels Standard ( RFS2 ). 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 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 US, 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 US that fail to meet EPA-designated national air quality standards, or in markets like California where the RVP maximum is very low.



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### **Competition**

Our isobutanol is targeted to three main markets: direct use as a solvent and gasoline blendstock, use in the chemicals industry for producing plastics, fibers, rubber 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 competition.*** 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 very competitive position in the development of renewable isobutanol production.

***Gasoline blendstock and solvent markets competition.*** 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., TetraVita Bioscience, Inc., 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 higher 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 of almost pure isobutanol and its limited energy costs and 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.

In the gasoline blendstock market isobutanol competes with non-renewable alkylate and renewable ethanol. According to the RFA, the global market for ethanol as a fuel blendstock was approximately 20 billion gallons in 2009, and we estimate the total potential global market for isobutanol as a gasoline blendstock at 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. Alkylate has a low RVP and high octane rating. 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 US gasoline market. Renewability is important in the US 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 gasoline blendstocks have lower octane ratings. Low RVP is important because the EPA sets maximum permissible RVP levels for gasoline. 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, high octane and renewability.

Many production and technology supply companies are working to develop ethanol production from cellulosic feedstocks, including Shell Oil Products US ( Shell Oil ), BP, DuPont-Danisco Cellulosic Ethanol LLC, Abengoa Bioenergy, S.A., POET, LLC, ICM, Mascoma, Range Fuels, Inbicon A/S, INEOS New Planet BioEnergy LLC, Coskata, Archer Daniels Midland Company, BlueFire Ethanol, Inc., KL Energy Corporation, ZeaChem Inc., Iogen Corporation, Qteros, Inc., AE Biofuels, Inc. and many smaller start-up 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.

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***Plastics, fibers, rubber and other polymers market competition.*** Isobutanol can be dehydrated to produce butenes, hydrocarbon products with many industrial uses in the production of plastics, fibers, 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 para-xylene 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, 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.

There is also one small company in France, Global Bioenergies, S.A., 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 market competition.*** 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. Supply limitations have begun to increase the cost of crude, and oil prices are extremely volatile. High and volatile oil prices 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 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 will 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. LS9, 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 20% higher yield on feedstock than the isoprenoid fermentation pathway developed by Amyris, which we believe will yield an approximately 20% production cost advantage.

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### **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, 2010, we exclusively licensed rights to 73 issued patents and filed patent applications in the US 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, 2010, we have submitted 184 patent applications in the US 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 US.

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® and GIFT® in the US, and we have a pending US trademark application for Gevo . The Gevo and GIFT marks 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 US. 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 one patent 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.

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### **Partnerships and Collaborations**

#### **ICM, Inc.**

We currently have an exclusive alliance with ICM for the commercial development of the GIFT® system that enables the production of isobutanol from retrofitted ethanol plants. 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 60% of the current US 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 1 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. This demonstrated that we can cost-effectively retrofit existing ethanol facilities to produce isobutanol, a cornerstone of our strategy. Unless it is terminated earlier, the development agreement, as amended, is effective through December 31, 2011.

**Commercialization Agreement.** We also entered into a commercialization agreement with ICM on October 16, 2008. Under this agreement, ICM serves as our exclusive engineering contractor for the retrofit of ICM-designed 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 any ICM-designed commercial plants utilizing dry-milled feedstocks of corn or grain sorghum. Pursuant to the commercialization agreement, we are working 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 ICM-designed 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.

We expect our alliance with ICM to help us continue to develop efficiency and cost improvements in retrofitting plants and producing isobutanol.

#### **UCLA**

We have licensed intellectual property based on research conducted at UCLA from The Regents, and we have obtained an exclusive license to UCLA's pathway for the production of isobutanol.

**License Agreement.** On September 6, 2007, we entered into an exclusive license agreement with The Regents to obtain certain patent rights to an alcohol production pathway which was developed in the course of research at the University of California. This exclusive license is specific to a certain field of use and The Regents reserve the right to use the patent rights and associated technology for educational and research purposes. The license agreement requires us to pay for all costs related to obtaining and maintaining patents on the licensed technology and we are required to pay annual license maintenance fees, cash payments upon achievement of certain milestones, and royalties based on our revenues from products utilizing the licensed technology. The license agreement has been amended to, among other things, expand the patent rights and the field of use and clarify The Regents' right to either (i) reduce the license to a nonexclusive license or (ii) terminate specific rights in the event that we fail to meet any of the due diligence deadlines set forth in the license agreement. Any such reduction or termination of our rights will apply only to the specific molecule for which the due diligence deadline was missed; the rights relating to other molecules will not be affected.

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### **Cargill, Incorporated**

We have developed a relationship with Cargill, and 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 with an even smaller environmental footprint, 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.** On February 19, 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.

### **California Institute of Technology**

**License Agreement.** In July 2005, we entered into a license agreement with California Institute of Technology (Caltech), to obtain a fully paid-up, exclusive license to certain patent rights and improvement rights arising from Dr. Frances Arnold's research at Caltech, and a nonexclusive license to use the related technology. As consideration for these rights, we issued shares of our common stock to Caltech. The license agreement has been amended to, among other things, relinquish our rights to patents that are no longer of use to our business, expand the field of use to include additional molecules and extend our right to improvements conceived or developed in Dr. Arnold's laboratory at Caltech through July 12, 2013. The term of the license agreement continues until the expiration or unenforceability of all of the licensed patent rights and improvement rights covered by the license agreement.

### **Other Material Agreements**

#### **Gevo Development, LLC**

In September 2009, Gevo, Inc. formed Gevo Development, LLC (Gevo Development), as a majority-owned subsidiary to develop isobutanol production assets using GIFT®. Gevo Development has a flexible business model and aims to secure access to existing ethanol capacity through joint ventures and direct acquisitions. Gevo Development has two classes of membership interests outstanding. Since Gevo Development's inception, Gevo, Inc. has been the sole owner of the class A interests, which comprise 90% of the outstanding equity interests of Gevo Development. When Gevo Development was formed, CDP Gevo, LLC (CDP), which is beneficially owned by the two co-managing directors of Gevo Development, was the sole owner of the class B interests, which comprise the remaining 10% of the outstanding equity interests of Gevo Development. In September 2010, Gevo, Inc. acquired 100% of the outstanding class B interests of Gevo Development from CDP pursuant to an equity purchase agreement. As a result of this acquisition, Gevo, Inc. currently owns 100% of the outstanding equity interests of Gevo Development as a wholly owned subsidiary. See further discussion under the heading Equity Purchase Agreement and Related Transactions below.

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***Amended and Restated Warrant Agreement.*** In September 2009, in connection with the formation of Gevo Development, Gevo, Inc. granted a common stock warrant to CDP pursuant to which CDP may purchase up to 858,000 shares of our common stock at an exercise price of \$2.70 per share, the estimated fair value of shares of our common stock at the time Gevo, Inc. granted the warrant. The warrant expires in September 2016, unless terminated earlier as provided in the agreement. In September 2010, upon the consummation of Gevo, Inc.'s purchase of the class B interests from CDP, the warrant agreement was amended and restated to provide that 50% of the warrant shares granted under such warrant agreement would vest on September 22, 2010. The remaining warrant shares will vest over a two-year period beginning on September 22, 2010, subject to acceleration and termination in certain circumstances. We valued the warrant at approximately \$13,956,000 on September 22, 2010 and recognized 50% of this amount as stock-based compensation on September 22, 2010. We will recognize the remaining 50% over the 24 month vesting period beginning on September 22, 2010.

***Equity Purchase Agreement and Related Transactions.*** In September 2010, Gevo, Inc. became the sole owner of Gevo Development by acquiring 100% of the class B interests in Gevo Development, which comprise 10% of the outstanding equity interests of Gevo Development, from CDP pursuant to an equity purchase agreement. In exchange for the class B interests, CDP will receive aggregate consideration of up to approximately \$1,143,000, (i) \$500,000 of which was paid when the purchase closed on September 22, 2010, (ii) \$274,000 of which was paid on December 30, 2010, and (iii) the remainder of which is payable in five equal quarterly installments beginning in January 2011, subject to the terms and conditions set forth in the equity purchase agreement. As of September 22, 2010, each of the owners of CDP is employed by Gevo, Inc. as an Executive Vice President, Upstream Business Development and as a co-managing director of Gevo Development. Upon the closing of the transactions contemplated by the equity purchase agreement, Gevo, Inc. amended and restated CDP's warrant agreement, as described above.

## **Agri-Energy Acquisition**

***Acquisition Agreement.*** In September 2010, we acquired all of the membership interests of Agri-Energy, LLC, a Minnesota limited liability company, and certain assets of Agri-Energy Limited Partnership, a Minnesota limited partnership (collectively referred to as "Agri-Energy"), from their common owner, CORN-er Stone Farmers' Cooperative, a Minnesota cooperative association. Pursuant to the terms of the acquisition, we acquired ownership of a 22 MGPY ethanol production facility located in Luverne, Minnesota which we plan to retrofit for isobutanol production. We paid a purchase price of \$20.6 million. In addition, we acquired and paid \$4.9 million for working capital. The acquisition agreement contains customary representations, warranties, covenants and indemnification provisions. As of December 31, 2010, \$1,660,000 remained in escrow as security for seller indemnification obligations and, subject to any claims that are made, will be released in December 2011.

We have begun the project engineering and permitting portion of the Agri-Energy facility retrofit process. The Agri-Energy facility is a traditional dry-mill facility, which means that it uses dry-milled corn as a feedstock. Based on an initial evaluation of the Agri-Energy facility by ICM, we project capital costs of approximately \$17 million to retrofit this plant to produce 18 MGPY of isobutanol. We expect to incur additional costs of approximately \$5 million related to, among other things, the construction of equipment and storage tanks designed to allow switching between isobutanol and ethanol production and conservative engineering estimates made in acknowledgment that the Agri-Energy facility will be our first commercial retrofit, bringing the total projected cost to approximately \$22 million. We expect to begin commercial production of isobutanol at the Agri-Energy facility in the first half of 2012.

## **TriplePoint Financing**

***Loan and Security Agreement 1.*** In August 2010, Gevo, Inc. entered into a loan and security agreement with TriplePoint Capital, LLC ("TriplePoint"), pursuant to which it borrowed \$5 million. The loan and security agreement includes customary affirmative and negative covenants for agreements of this type and events of default. The aggregate amount outstanding under the loan and security agreement bears interest at a rate equal to 13%, is subject to an end-of-term payment equal to 8% of the amount borrowed and is secured by substantially

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all of the assets of Gevo, Inc., other than its intellectual property. Additionally, under the terms of each of (i) the loan and security agreement and (ii) Gevo, Inc.'s guarantee of Gevo Development's obligations under the loan and security agreement described below, Gevo, Inc. is prohibited from granting a security interest in its intellectual property assets to any other entity until both TriplePoint loans are paid in full. The loan matures on August 31, 2014, and provides for interest only payments during the first 24 months. An additional interest-only period may be elected now that Gevo, Inc. has completed an initial public offering and a subsequent interest-only period will become available in the event that Gevo, Inc. is producing isobutanol at its Agri-Energy facility by June 30, 2012. Each such additional interest-only period may be for a maximum of 6 months, for a total possible interest-only extension period of 12 months. Gevo, Inc. used the funds from this loan to repay \$5 million in outstanding principal under its loan facility with Lighthouse Capital Partners V, L.P. ( "Lighthouse"). This loan is also secured by substantially all of the assets of Agri-Energy, LLC.

**Loan and Security Agreement 2.** In August 2010, Gevo Development entered into a loan and security agreement with TriplePoint under which, upon the satisfaction of certain conditions, Gevo Development could borrow up to \$12.5 million to finance the transactions contemplated by the acquisition agreement with Agri-Energy. In September 2010, Gevo Development borrowed the \$12.5 million and closed the transactions contemplated by the acquisition agreement, at which time the loan and security agreement was amended and Agri-Energy, LLC became a borrower under the loan and security agreement. The loan and security agreement includes customary affirmative and negative covenants for agreements of this type and events of default. The loan bears interest at a rate equal to 13% and is subject to an end-of-term payment equal to 8% of the amount borrowed. The loan is secured by the equity interests of Agri-Energy held by Gevo Development and substantially all the assets of Agri-Energy. The loan matures on September 1, 2014, with interest only payments during the first 24 months, and is guaranteed by Gevo, Inc. pursuant to a continuing guaranty executed by Gevo, Inc. in favor of TriplePoint, which is secured by substantially all of the assets of Gevo, Inc., other than its intellectual property. An additional interest-only period may be elected now that Gevo, Inc. has completed an initial public offering and a subsequent interest-only period will become available in the event that Gevo, Inc. is producing isobutanol at its Agri-Energy facility by June 30, 2012. Each such additional interest-only period may be for a maximum of 6 months, for a total possible interest-only extension period of 12 months.

**Warrant Agreements and Conversion of Warrants.** In connection with the loan and security agreements with TriplePoint described above, Gevo, Inc. issued TriplePoint warrants to purchase 105,140 shares of its Series D-1 preferred stock at an exercise price of \$17.12. The warrants provide TriplePoint with registration rights. The warrants became exercisable for 199,999 shares of Gevo, Inc. common stock upon completion of our initial public offering on February 14, 2011, subject to antidilution adjustments upon the occurrence of certain events, and may be exercised until August 5, 2017.

## Research and Development

Our strategy depends on continued improvement of our technologies for the production of isobutanol, as well as next generation chemicals and advanced biofuels based on our isobutanol technology. Accordingly, we annually devote significant funds to research and development. In fiscal years 2008, 2009 and 2010, we spent \$7,376,000, \$10,508,000 and \$14,820,000, respectively, on research and development activities. The following table shows our research and development costs by function during the three years ended December 31, 2008, 2009 and 2010:

	2008	2009	2010
Biocatalyst development	\$ 5,166,000	\$ 7,007,000	\$ 9,504,000
Process engineering and operation of pilot and demo plants	1,215,000	2,722,000	4,469,000
Chemistry and applications development	995,000	779,000	847,000
	\$ 7,376,000	\$ 10,508,000	\$ 14,820,000

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During 2008, 2009 and 2010, we recorded revenue from government grants and cooperative agreements in the amounts of \$208,000, \$660,000 and \$1,493,000, respectively, which primarily related to research and development activities performed in our biocatalyst group.

Our research and development activities are currently being performed primarily in our corporate headquarters located in Englewood, Colorado as well as at the demonstration plant within ICM's facility in St. Joseph, Missouri.

### **Environmental Compliance Costs**

Regulation by governmental authorities in the US 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 will 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 US, 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 fermentation process creates protein fermentation meal, a potential animal feed component, as a co-product. Before we can sell protein fermentation meal for animal consumption, we require approval from the Center for Veterinary Medicine of the FDA. The FDA's policies may change and additional government regulations may be enacted that could prevent or delay 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 US or abroad. This risk is eliminated at wet corn mills, which we also plan on retrofitting, because instead of extracting protein grains post-fermentation, wet mills separate out valuable proteins before the feedstock comes into contact with the biocatalyst.

Our process contains a genetically engineered organism which, when used in an industrial process, is considered a new chemical under the US 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 (MCAN) 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 US 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 US and internationally. 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 US 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 our isobutanol assets. They may require expensive pollution control equipment or



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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, 2010, Gevo, Inc. and its subsidiaries employed 91 employees. Gevo, Inc. employed 64 of our total employees, 60 of which were located in Englewood, Colorado. Of the Gevo, Inc. employees, 41 were engaged in research and development activities and 23 were engaged in general, administrative and business development activities. As of December 31, 2010, 20 Gevo, Inc. employees held Ph.D. degrees. As of December 31, 2010, our subsidiary Agri-Energy employed 27 employees, all of which were located in Luverne, Minnesota, and involved in the operations of our ethanol 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: the Gevo, Inc. Segment and 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

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consolidation. For both segments, all revenue is earned and all assets are held in the US. For additional financial information related to our segments, see Note 18 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, our retrofit process and the next generation of chemicals and advanced 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 responsible for the production of ethanol and related products. Upon the completion of the Agri-Energy acquisition we acquired an operating 22 MGPY ethanol production facility in Luverne, Minnesota, which we are retrofitting to isobutanol production. Agri-Energy is a wholly owned subsidiary of Gevo Development. The principal products produced by our Gevo Development/Agri-Energy Segment are ethanol and related products. Substantially all of the ethanol produced from the date of the acquisition through December 31, 2010 was sold through an ethanol marketing company. Sales of ethanol and related products from our Gevo Development/Agri-Energy Segment comprised approximately 90% of our consolidated revenue for the fiscal year ended December 31, 2010.

## **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.

On February 14, 2011, we completed our initial public offering of common stock in which a total of 8,222,500 shares were sold, at an issue price of \$15.00 per share. We raised approximately \$110.4 million in net proceeds after deducting underwriting discounts and commissions of \$8.6 million and other estimated offering costs of \$4.3 million. Upon the closing of the initial public offering, all shares of convertible preferred stock outstanding automatically converted into an aggregate of 16,329,703 shares of common stock. The consolidated financial statements as of and for the period ended December 31, 2010 do not include the effects of the offering because it was completed after December 31, 2010.

## **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](http://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.

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### **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 \$14.5 million \$19.9 million and \$40.1 million in 2008, 2009 and 2010, respectively. As of December 31, 2010, we had an accumulated deficit of \$85.3 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 have been extremely limited and we have not generated any revenues from the sale of isobutanol. Historically, our revenues have been primarily derived from government grants and cooperative agreements. Since the completion of the Agri-Energy acquisition in September 2010, we have generated revenue from the sale of ethanol and related products, and we expect to continue to generate revenue from the sale of all such products that are produced prior to the completion of our retrofit. 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, our revenues could be adversely affected. Furthermore, we expect to spend significant amounts on further development of our technology, acquiring or otherwise gaining access to ethanol plants and retrofitting them for isobutanol production, marketing and general and administrative expenses associated with our planned growth and 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 defending the lawsuit filed by Butamax, a joint venture between DuPont and BP, alleging that we have infringed upon one patent relating to the production of isobutanol, may become significant (as described further in Part I, Item 3 of this Report). 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 this period, 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.

***Our planned retrofit of the ethanol production facility in Luverne, Minnesota will be our first commercial retrofit, and, as a result, our production of isobutanol could be delayed or we could experience significant cost overruns in comparison to our current estimates.***

In September 2010, we acquired ownership of an ethanol production facility in Luverne, Minnesota, which we intend to retrofit to produce isobutanol. We expect to pay much of the retrofit costs with our own funds, but we also expect to secure additional funding to complete the retrofit. While we anticipate that additional funding for the retrofit may be available from TriplePoint, cost overruns or other unexpected difficulties could cause the retrofit to cost more than we anticipate, which could increase our need for such 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 initial commercial production of isobutanol. If additional funding is not available to us, or not available on terms acceptable to us, it could force us to use significantly more of our own funds than planned, limiting our ability to acquire access to or retrofit additional ethanol plants. Such a result could reduce the scope of our business plan and have an adverse effect on our results of operations.

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***There is no guarantee we will be able to maintain Agri-Energy's historical revenues and results from operations, and Agri-Energy's historical financial statements will not be a strong indicator of our future earnings potential.***

While we remain a development stage company, Agri-Energy operates a commercial ethanol facility in Luverne, Minnesota, which generates revenues from sales of ethanol and reported net income of approximately \$2 million for the year ended December 31, 2009. There is no guarantee that we will be able to maintain Agri-Energy's historical levels of revenue or results from operations. We plan to retrofit the Agri-Energy facility to produce isobutanol, and our future profitability depends on our ability to produce and market isobutanol, not on continued production and sales of ethanol. Because the risks involved in our isobutanol production are different from those involved with operating an ethanol production facility, Agri-Energy's financial results prior to the completion of the planned retrofit to isobutanol production will not be a reliable indicator of our future earnings potential. Furthermore, our planned retrofit will require a significant amount of time. While we believe the facility will be able to continue ethanol production during most of the modification and retrofit process, there is no guarantee that this will be the case and we may need to significantly reduce or halt ethanol production during the modification and/or retrofit. In addition, the retrofit of the Agri-Energy facility will be subject to the risks inherent in the build-out of any manufacturing facility, and we may not be able to produce isobutanol at the volumes, rates and costs we expect following the retrofit. While we believe we will have the ability to reverse the retrofit and switch between ethanol and isobutanol production, the Agri-Energy facility may fail to perform as expected following completion of the retrofit. If we are unable to continue ethanol production during the modification and/or retrofit process or if we are unable to produce isobutanol at the volumes, rates and costs we expect and are unable to switch back to ethanol production, 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 the date of this Report, we have not produced commercial quantities of isobutanol and we may not be successful in doing so. 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. While we have produced isobutanol using our first- and second- generation biocatalysts at the demonstration facility, such production was not at full scale. We have focused the majority of our research and development efforts on producing isobutanol from dextrose, and challenges remain in achieving substantial production volumes with other sugars, like 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 never sourced large quantities of feedstocks and we have no experience 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



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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.

We have estimated the retrofit and operating costs for our initial large-scale commercial isobutanol facility based upon a commercial engineering study completed by ICM in May 2010. Neither we nor ICM have 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 1 MGPY demonstration facility will scale up to larger facilities, but these assumptions may prove to be incorrect. In addition, if existing tax credits, subsidies and other incentives in the US and foreign markets are phased out or reduced, the overall cost of commercialization of isobutanol could increase. Accordingly, we cannot be certain that we can manufacture isobutanol in an economical manner in commercial quantities. If we fail to manufacture 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 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, existing ethanol facilities for the production of large quantities of isobutanol for commercial distribution and sale. We have acquired one 22 MGPY ethanol production facility, and we plan to acquire additional production capacity to enable us to produce and sell over 350 MGPY of isobutanol in 2015. We may not find development partners with whom we can implement this growth strategy, and we may not be able to identify facilities suitable for joint venture, acquisition or lease. 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 or lease, 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. Even if the owners of the 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. 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 of our customers. Failure to acquire access to sufficient capacity in a timely manner, if at all, may slow or stop our commercialization process and cause our business performance to suffer.

***Once we acquire access to ethanol facilities, we may be unable to successfully retrofit them to produce isobutanol, and 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. 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. Neither we nor ICM has ever built, via retrofit or otherwise, a full-scale commercial isobutanol facility. Our estimates of the capital costs that we will need to incur to retrofit a commercial-scale ethanol facility are based upon a commercial engineering study completed by ICM in May 2010. These estimates may prove to be inaccurate, and each retrofit may cost materially more to engineer and build than we currently anticipate. For example, our

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estimates assume that each plant we retrofit will be performing at full production capacity, and we may need to expend substantial sums to repair underperforming facilities prior to retrofit.

Our retrofit design was developed in cooperation with ICM and is based on ICM technology. There is no guarantee that our 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 initial retrofit design includes the capability to switch between isobutanol and ethanol production, we may be unable to successfully revert to ethanol production after we begin retrofit of an ethanol facility, or the facility may produce ethanol less efficiently or in lower volumes than it did before the retrofit. 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 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, 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. Failure to achieve these rates, 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. 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 or terminate the agreement completely. A failure to successfully meet the specifications of our potential customers could decrease demand for our production, and significantly hinder market adoption of our product.

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***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 a commercial ethanol facility and no experience operating a commercial isobutanol facility. Accordingly, we may encounter significant difficulties operating at a commercial scale. We believe that our facilities will 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 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 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 succeeded, at the demonstration plant, in reaching our commercial fermentation performance targets for isobutanol concentration, fermentation productivity and isobutanol yield, we have not accomplished this in a commercial plant environment. We have successfully achieved our commercial performance targets using our second-generation biocatalyst at our mini-plant, but have not yet done so at the demonstration or commercial plant scale. We are currently optimizing our second-generation biocatalyst in anticipation of its integration into the demonstration and commercial facilities, but this process, if it succeeds at all, may take longer or cost more than expected. Even if we are successful in developing and using our second-generation biocatalyst to meet our performance targets at the demonstration facility, this yeast biocatalyst may not be able to meet these targets at a commercial scale retrofitted plant in a timely manner, or ever. In addition, the risk of contamination and other problems exists at commercial scale isobutanol production which could negatively impact our cost of production. If we encounter difficulties in scaling up 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 refiners and chemical producers.***

A key component of our business strategy is to market our isobutanol to refiners and chemical producers. If we fail to successfully market our isobutanol to refiners and chemical producers, our business, financial condition and results of operations will be materially adversely affected.

No market currently exists for isobutanol as a fuel or fuel blendstock. Therefore, to gain market acceptance and successfully market our isobutanol to 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



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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 fuel 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 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 fuel, no one has successfully created isobutylene on a commercial scale from biobased 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.

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.***

Commercialization of our isobutanol will require approvals from state and federal agencies. Before we can sell isobutanol as a fuel or fuel blendstock directly to large petroleum refiners, we must receive EPA fuel certification. We are currently conducting 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.

Before any biofuel we produce receives a RIN, we must register it with the EPA and receive approval that it meets specified regulatory requirements. Delay or failure in developing a fuel that meets the standards for advanced and cellulosic biofuels, or delays in receiving the desired RIN, will make our fuel less attractive to refiners, blenders, and other purchasers, which could harm our competitiveness.

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.

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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 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 UL involved in standard-setting regarding the transportation, dispensing and use of liquid fuel in the US and abroad. These organizations may change 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 ethanol facilities and operate the retrofitted 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 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.

We are in negotiations, facilitated by the ATA with several major passenger and cargo airlines for potential commitments by several ATA member airlines to purchase jet fuel manufactured by third parties from our isobutanol. Jet fuels must meet various statutory and regulatory requirements before they may be used in commercial aviation. In the US, 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 our biojet fuel. Though our work testing isobutanol-based biojet fuel with the US Air Force Research Laboratory has provided us with data we believe ASTM will consider, 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.***

We have engaged in negotiations with a number of companies, and 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, TOTAL PETROCHEMICALS, Toray Industries, Sasol and United Airlines. However, none of these agreements are binding, and we have yet to negotiate any final, definitive supply or distribution agreements for our isobutanol. We may be unable to negotiate final terms 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

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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 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, whereby a buyer agrees to purchase all or a significant portion of a plant's isobutanol output for a given time period. 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 dedicate additional 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.

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

In the fuel 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 automotive engine conditions, isobutanol will face significant limitations, making it unsuitable for use in high percentage gasoline blends. Additionally, current regulations limit fuel blends to low percentages of isobutanol, and also limit combination isobutanol-ethanol blends. Government agencies may maintain or even increase the restrictions on isobutanol fuel 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 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 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.

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***We may face substantial delay in receiving FDA approval to sell protein fermentation meal as an animal feedstock, which could substantially increase our net production costs.***

Most of the ethanol plants we initially plan to retrofit use dry-milled corn as a feedstock. We plan to sell, as an animal feedstock, the protein fermentation meal 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. Before our protein fermentation meal can be used as an animal feedstock, the FDA must approve it as safe for livestock consumption. 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 protein fermentation meal, 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. 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 1 MGPY ethanol demonstration facility, and ICM agreed to assist us in running and maintaining the converted plant. We currently use the demonstration plant to improve our second-generation biocatalyst and develop processes for commercial-scale production of isobutanol. Under the commercialization agreement, ICM serves as our exclusive engineering, procurement and construction (EPC), contractor for the retrofit of ICM-designed ethanol plants, and we serve as ICM's exclusive technology partner for the production of butanols, pentanols and propanols from the fermentation of sugars.

Because ICM has designed approximately 60% of the current operating ethanol production capacity in the US, 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.

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

Since our inception, most of our resources have been dedicated to research and development, as well as demonstrating the effectiveness of our technology at the St. Joseph, Missouri plant. We believe that we will continue to expend substantial resources for the foreseeable future on further developing our technologies and accessing 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 the plants 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

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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 private equity offerings and the issuance of convertible and nonconvertible debt. We believe that the net proceeds from our initial public offering, together with our existing cash and cash equivalents and government grants, will allow us to take a substantial step toward implementing our strategy. However, based on our current plans and expectations, we will require additional funding to achieve our goal of producing and selling over 350 million gallons of isobutanol in 2015. 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. Currently, we are a defendant to a lawsuit filed by Butamax, a joint venture between DuPont and BP, alleging that we have infringed upon one patent relating to the production of isobutanol (as described further in Part I, Item 3 of this Report). 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. 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 our technologies for commercial-scale 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 cost of operating and maintaining 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;

our ability to negotiate sales of our isobutanol for commercial-scale production of butenes and other industrially useful chemicals and fuels, and the timing and terms of those sales;

our ability to sell the protein fermentation meal 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

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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. 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.

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

We may 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 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 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 and 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 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. 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 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. 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 we plan to retrofit to produce isobutanol, including the Agri-Energy facility in Luverne, Minnesota, 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 biobased 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 biobased alternatives.

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### ***Changes in the prices of distiller's grains and protein fermentation meal could have a material adverse effect on our financial condition.***

We sell distiller's grains as a co-product from the production of ethanol at the Agri-Energy facility in Luverne, Minnesota and we also plan to sell the protein fermentation meal that will be produced as a co-product of our commercial isobutanol production. Distiller's grains and protein fermentation meal 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 protein fermentation meal. If the price of distiller's grains and protein fermentation meal decreases, our revenue from the sale of distiller's grains and protein fermentation meal 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, we will be vulnerable to fluctuations in the price of and cost to produce ethanol.***

We believe that the ethanol production facilities we access, including the Agri-Energy facility in Luverne, Minnesota, will continue to produce ethanol during most of the retrofit process. We expect to obtain income from this ethanol production. 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.

### ***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 concerning the petroleum industry. For example, in 2007, the US Congress passed an alternative fuels mandate that currently calls for 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. In the US 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 demand for biofuels to decline and deter investment in the research and development of biofuels. Market uncertainty regarding future policies may also affect our ability to develop new biofuels products or to license our technologies to third parties. Any inability to address these requirements and any regulatory or policy changes could have a material adverse effect on our biofuels business, financial condition and results of operations. Our other potential bioindustrial products may be subject to additional regulations.

Additionally, like the ethanol facilities we plan to retrofit, our isobutanol plants will emit greenhouse gasses. 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 protein fermentation meal 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 any 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:

issue additional equity securities which would dilute our current stockholders;

incur substantial debt to fund the acquisitions; or

assume significant liabilities.





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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. Acquisitions may also require us to record goodwill, non-amortizable intangible assets that will be subject to impairment testing on a regular basis and potential periodic impairment charges, incur amortization expenses related to certain intangible assets and incur large and immediate write-offs and restructuring and other related expenses, all of which could harm our operating results and financial condition. 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 any of our 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 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 our loan agreements 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 our loan and security agreements 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, which means 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.

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*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 US and other countries. We have adopted a strategy of seeking patent protection in the US 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, 2010, we exclusively licensed rights to 73 issued patents and filed patent applications in the US and in various foreign jurisdictions, and we own rights to approximately 184 filed patent applications in the US 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.

None of the patent applications that we have filed in the US 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 US or other territories and we may be unable to prove that such products were made using our inventions. Additional uncertainty may result from potential passage of patent reform legislation by the US Congress and from legal precedent as handed down by the US Court of Appeals for the Federal Circuit and the US Supreme Court, as they determine legal issues concerning the scope, validity and construction of patent claims. Because patent applications in the US 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) that 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

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the US, 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 also may 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 proceedings declared by the US Patent and Trademark Office to determine priority of invention and, thus, the right to the patents for these inventions in the US. These proceedings could result in substantial cost to us even if the outcome is favorable. Even if successful, an interference may result in loss of certain claims. Even successful interference outcomes 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.

***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, a joint venture between DuPont and BP, is successful in its lawsuit alleging that we are infringing their patent 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

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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 against a lawsuit filed by Butamax, a joint venture between DuPont and BP to develop and market isobutanol, in which it has alleged that we have infringed one patent for certain recombinant microbial host cells that produce isobutanol and methods for the production of isobutanol using such host cells.

Our involvement in litigation, interferences, opposition proceedings or other intellectual property proceedings inside and outside of the US 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 potential intellectual property litigation also could 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; 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 in the current patent infringement lawsuit recently filed by Butamax.

### ***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 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 have received funding from US government agencies, which could negatively affect our intellectual property rights.***

Some of our research has been funded by grants from US government agencies. When new technologies are developed with US 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. US government funding must be disclosed in any resulting patent applications, and our rights in such inventions will normally be subject to government license

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rights, periodic progress reporting, foreign manufacturing restrictions and march-in rights. March-in rights refer to the right of the US 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 US 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.

### ***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 US. 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.

### ***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.

### ***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.

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

We may face substantial competition in the markets for isobutanol, plastics, fibers, rubber, other polymers and hydrocarbon fuels. Our competitors include companies in the incumbent petroleum-based industry as well as those

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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.

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 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.

Significant competitors in these areas include Codexis, Inc., which is engaged with Equilon Enterprises LLC dba Shell Oil, in a research and development collaboration under which they are developing biocatalysts for use in producing advanced biofuels; Novozymes A/S, which has partnered with a number of companies and organizations on a regional basis to develop or produce biofuels, and recently opened a biofuel demonstration plant with Inbicon A/S of Denmark; Danisco A/S/Genencor, which has formed a joint venture with E.I. DuPont called DuPont Danisco Cellulosic Ethanol LLC, and is marketing a line of cellulases to convert biomass into sugar; Royal DSM N.V., which received a grant from the US Department of Energy to be the lead partner in a technical consortium including Abengoa Bioenergy New Technologies, Inc., and is developing cost-effective enzyme technologies; Mascoma Corporation, which has entered into a feedstock processing and lignin supply agreement with Chevron Technology Ventures, a division of Chevron USA, Inc.; and BP, which has purchased Vercipia Biofuels, LLC and technology from Verenium Corporation to develop a commercial-scale cellulosic ethanol facility. Range Fuels, Inc. is also focused on developing non-biocatalytic thermochemical processes to convert cellulosic biomass into fuels, and Coskata, Inc. is developing a hybrid thermochemical-biocatalytic process to produce ethanol from a variety of feedstocks.

In the production of cellulosic biofuels, key competitors include Shell Oil, BP, DuPont-Danisco Cellulosic Ethanol LLC, Abengoa Bioenergy, S.A., POET, LLC, ICM, Mascoma, Range Fuels, Inbicon A/S, INEOS New Planet BioEnergy LLC, Coskata, Archer Daniels Midland Company, BlueFire Ethanol, Inc., KL Energy Corporation, ZeaChem Inc., Iogen Corporation, Qteros, Inc., AE Biofuels, Inc. and many smaller start-up 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.

Additionally, DuPont has announced plans to develop and market isobutanol through Butamax, a joint venture with BP. A number of companies including Cathay Industrial Biotech, Ltd., Green Biologics Ltd., METabolic Explorer, S.A., TetraVitae Bioscience, Inc. and Cobalt Technologies, Inc. are developing n-butanol production capability from a variety of renewable feedstocks. Academic and government institutions may also develop technologies which will compete with us in the blendstock market.

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 plastics, fibers, rubber 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 more adept at marketing their production. Additionally, one small company in France, Global Bioenergies, S.A., is pursuing the production of isobutylene from

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renewable carbohydrates directly. Since conversion of isobutanol to butenes such as isobutylene is a key step in producing many plastics, fibers, rubber and other polymers from our isobutanol, this direct production of renewable isobutylene, if successful, could limit our opportunities in these markets.

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. One competitor, Virent Energy Systems, Inc. (Virent), has developed a process for making gasoline and gasoline blendstocks, and 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. LS9, 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, and LS9 have developed technologies for production of alternative hydrocarbon diesel fuel.

In the plastics, fibers, rubber 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 joint ventures 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 fuel 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



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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 our loan and security agreements with Lighthouse and TriplePoint may restrict our ability to engage in certain transactions.***

In December 2006, we entered into a loan and security agreement, as amended, with Lighthouse, and in August 2010, we entered into two loan and security agreements with TriplePoint. Pursuant to the terms of these loan and security agreements, we cannot engage 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 Lighthouse and/or TriplePoint. If Lighthouse and/or TriplePoint do 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(s) in full. As of December 31, 2010, the aggregate outstanding principal and final payment under our loan from Lighthouse was approximately \$3.1 million, and the aggregate outstanding principal and final payments under the two loans from TriplePoint was approximately \$18.9 million.

### ***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 riot, civil disturbances, war, terrorist acts, flood, 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.***

Through our Agri-Energy subsidiary in Luverne, Minnesota, we currently engage in hedging transactions to offset some of the effects of volatility in commodity prices. We expect to engage in similar transactions once we begin commercial isobutanol production. We generally follow a policy of using exchange-traded futures contracts to reduce our net position in merchandisable agricultural commodity inventories and forward cash purchase contracts to manage price risk. Hedging activities may cause us to suffer losses, such as if we purchase

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a position in a declining market or sell a position in a rising market. Furthermore, hedging exposes us to the risk that the other party to a hedging contract defaults on its obligation. 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 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.***

Any biofuels developed using our technologies will need to meet a significant number of regulations and standards, including regulations imposed by the US Department of Transportation, the EPA, 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.



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***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 been used as a commercial fuel and research regarding its impact on engines and distribution infrastructure is ongoing. Though we intend to test isobutanol further before 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.

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

In general, under Section 382 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an ownership change 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 this public offering may itself trigger an ownership change; hence our ability to utilize our net operating losses to offset income if we attain profitability may be limited. In addition, these loss carry-forwards expire at various times through 2030. We believe that it is more likely than not that these carry-forwards will not result in any material future tax savings.

***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.

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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.

***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 will require us to evaluate and report on our internal control over financial reporting beginning with our Annual Report on Form 10-K for the year ending December 31, 2011. The process of implementing our internal controls and complying with Section 404 will be expensive and time consuming, and will require significant attention of management. We cannot be certain that these measures will ensure that we implement and 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 its inherent limitations, internal control over financial reporting may not prevent or detect fraud or misstatements. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our results of operations or cause us to fail to meet our reporting obligations. 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 Stock**

***We are subject to anti-takeover provisions in our certificate of incorporation and bylaws and under Delaware law that could delay or prevent an acquisition of our company, even if the acquisition would be beneficial to our stockholders.***

Provisions in our amended and restated certificate of incorporation and our bylaws may delay or prevent an acquisition of us. Among other things, our amended and restated certificate of incorporation and bylaws provide

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for a board of directors which is divided into three classes, with staggered three-year terms and 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 our company may be considered beneficial by some stockholders.

***Concentration of ownership among our existing officers, directors and principal stockholders may prevent other stockholders from influencing significant corporate decisions and depress our stock price.***

After accounting for the 8,222,500 shares of common stock which were sold in our initial public offering in February 2011, our officers, directors and existing stockholders who held at least 5% of our common and preferred stock as of December 31, 2010 together control approximately 70.4% of our outstanding common stock. As of December 31, 2010, Khosla Ventures I, L.P. and its affiliates ( Khosla Ventures ), Virgin Green Fund I, L.P. ( Virgin Green ), Total Energy Ventures International, LANXESS Corporation, Burrill Life Sciences Capital Fund III, L.P. ( Burrill ), and Malaysian Life Sciences Capital Fund Ltd. ( Malaysian Capital ), beneficially owned approximately 27.5%, 10.8%, 9.5%, 8.7%, 7.4% and 6.5% of our outstanding common stock, respectively on an as-converted basis, after accounting for the conversion of our outstanding preferred stock based on our initial public offering issuance price of \$15.00 per share. If these officers, directors and principal stockholders or a group of our principal stockholders 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, officers, directors and principal stockholders, 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 our company otherwise favored by our other stockholders. This concentration of ownership could depress our stock price.

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

The market price of shares of our common stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, 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;

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the entry into, modification or termination of licensing arrangements;

the entry into, modification or termination of research, development, commercialization, supply or distribution arrangements;

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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 RFS program, and the adoption or failure to adopt carbon emissions regulation;

announcement or expectation of additional financing efforts;

sales of our common stock 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. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. 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.

A significant portion of our total outstanding shares of common stock is restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. After accounting for 8,222,500 shares of common stock which were sold in our initial public offering in February 2011, our three largest



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stockholders as of December 31, 2010 beneficially own, collectively, approximately 47.8% 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. Based on shares outstanding as of December 31, 2010, but after accounting for the 8,222,500 shares of common stock which were sold in our initial public offering in February 2011, and the conversion of our outstanding preferred stock based on our initial public offering price of \$15.00 per share, we had 25,712,860 outstanding shares of common stock. This includes 8,222,500 shares sold in our initial public offering. Of the remaining shares, 17,490,360 shares of common stock are subject to a 180-day contractual lock-up with the underwriters. Upon expiration of the lockup agreements, these shares will be eligible for immediate resale, subject in some cases to the volume and other restrictions of Rules 144 and 701 under the Securities Act of 1933, as amended (the Securities Act ). These shares represent a substantial fraction of our total shares outstanding, and sales of these shares upon expiration of the lock-up could significantly depress our share price.

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In addition, as of December 31, 2010, there were 2,894,265 shares subject to outstanding options that will become eligible for sale in the public market to the extent permitted by any applicable vesting requirements, the lock-up agreements and Rules 144 and 701 under the Securities Act. Moreover, after accounting for the 8,222,500 shares of common stock which were sold in our initial public offering in February 2011 at an initial public offering price of \$15.00 per share, holders of an aggregate of approximately 16,939,735 shares of our outstanding common stock (including shares of our common stock issuable upon the exercise of 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 have registered 6,751,194 shares of common stock which were reserved for issuance under our stock incentive plans and our employee stock purchase plan, after accounting for the 8,222,500 shares of common stock which were sold in our initial public offering in February 2011 at an initial public offering price of \$15.00 per share. These shares can be freely sold in the public market upon issuance and once vested, subject to the 180-day lock-up periods under the lock-up agreements.

***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. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

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

The terms of our loan and security agreement with Lighthouse currently prohibits us from paying cash dividends on our common stock and we do not anticipate paying cash dividends in the future. 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. Under the terms of Agri-Energy's \$12.5 million loan and security agreement with TriplePoint, as amended, 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 million, and (iii) no event of default has occurred and is continuing under the agreement. 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 its loan and security agreement with TriplePoint.

### **Item 1B. Unresolved Staff Comments**

None.

### **Item 2. Properties**

Our corporate headquarters and research and development laboratories 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 2013. 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, owns and operates an ethanol production facility in Luverne, Minnesota that we intend to retrofit for isobutanol production. This production facility is on approximately 55 acres of land.

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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 has granted to TriplePoint a mortgage lien and security interest in such property to secure its obligations under the \$12.5 million loan and security agreement with TriplePoint and its guaranty of Gevo, Inc.'s obligations under the \$5 million loan and security agreement with TriplePoint.

### **Item 3. Legal Proceedings**

On January 14, 2011, Butamax, a joint venture between BP and DuPont, filed a complaint in the United States District Court for the District of Delaware, as Case No. 1:11-cv-00054-UNA, alleging that we are infringing one or more claims made in US Patent No. 7,851,188, entitled

Fermentive production of four carbon alcohols. This 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. We believe that Butamax's claims are without merit and that we do not infringe any claims made in US Patent No. 7,851,188. We intend to contest Butamax's allegations of infringement and defend this matter vigorously. On March 25, 2011, we filed our response to the complaint, denying Butamax's allegations of infringement and raising affirmative defenses.

### **Item 4. [Reserved.]**

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**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 began trading on the NASDAQ Global Market under the symbol **GEVO** on February 9, 2011.

**Holders of Record**

The last sale price of our common stock on March 25, 2011, as reported by NASDAQ, was \$17.84 per share. As of March 25, 2011, there were approximately 38 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.

**Equity Compensation Plan Information**

The information required by Item 201(d) of Regulation S-K will be included in the definitive proxy statement for our 2011 annual meeting of stockholders or an amendment to this Report to be filed with the SEC within 120 days after our fiscal year ended December 31, 2010, and is incorporated into this Report by reference.

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

***Sales of Unregistered Securities***

Between January 1, 2010 and December 31, 2010, we issued and sold the following unregistered securities:

1. Between March and May 2010, we issued and sold 1,902,087 shares of Series D-1 convertible preferred stock to venture capital funds and other investors at a per share price of \$17.12, for aggregate consideration of approximately \$32.56 million. These shares of Series D-1 convertible preferred stock converted into 3,618,188 shares of our common stock upon completion of our initial public offering on February 14, 2011.
2. Between January 1, 2010 and December 31, 2010, we granted stock options to purchase 446,880 shares of our common stock at exercise prices ranging from \$10.07 to \$12.67 per share to our employees, consultants and directors. Between January 1, 2010 and December 31, 2010, we issued and sold an aggregate of 31,547 shares of our common stock to our employees, consultants and directors at prices ranging from \$0.47 to \$2.70 per share pursuant to exercises of options.
3. In August and September 2010, we issued warrants to purchase an aggregate of 105,140 shares of Series D-1 convertible preferred stock to TriplePoint Capital LLC. The warrants became exercisable for 199,999 shares of our common stock upon completion of our initial public offering on February 14, 2011 and may be exercised until August 5, 2017 (see Note 7 to our consolidated financial statements).
4. In September 2010, Khosla Ventures I, LP exercised its warrant to purchase 108,076 shares of our Series C convertible preferred stock at an exercise price of \$5.48 per share. These shares of Series C convertible preferred stock converted into 108,076 shares of our common stock upon completion of our initial public offering on February 14, 2011.



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The issuance of securities described above in paragraphs (1), (3), and (4) were exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act or Regulation D or Regulation S promulgated thereunder, as transactions by an issuer not involving any public offering. The purchasers of the securities in these transactions represented that they were accredited investors and that they were acquiring the securities for investment only and not with a view toward the public sale or distribution thereof. Such purchasers received written disclosures that the securities had 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. All purchasers either received adequate financial statement or non-financial statement information about us or had adequate access, through their relationship with us, to financial statement or non-financial statement information about us. The sale of these securities was made without general solicitation or advertising.

The issuance of securities described above in paragraph (2) was exempt from registration under the Securities Act in reliance on Rule 701 of the Securities Act pursuant to compensatory benefit plans or agreements approved by our board of directors.

All certificates representing the securities issued in these transactions described above included appropriate legends setting forth that the securities had not been offered or sold pursuant to a registration statement and describing the applicable restrictions on transfer of the securities. There were no underwriters employed in connection with any of the transactions set forth above.

### ***Use of Proceeds from Public Offering of Common Stock***

On February 14, 2011, we closed our initial public offering. The offer and sale of 8,222,500 shares of our common stock in the initial public offering were registered under the Securities Act pursuant to a registration statement on Form S-1 (File No. 333-168792), which was declared effective by the SEC on February 8, 2011. The principal underwriters of the initial public offering were UBS Securities LLC, Piper Jaffray & Co. and Citigroup Global Markets Inc. We raised approximately \$110.4 million in net proceeds after deducting underwriting discounts and commissions of \$8.6 million and other estimated offering costs of \$4.3 million. There has been no material change in the planned use of proceeds from our initial public offering as described in our final prospectus filed with the SEC pursuant to Rule 424(b). We have and intend to continue to invest these funds in interest-bearing demand deposit accounts or short-term investment-grade securities.

### **Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

None.

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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 2008, 2009 and 2010 and the consolidated balance sheet data as of December 31, 2009 and 2010 from our audited consolidated financial statements in Part II, Item 8 of this Report. The consolidated statement of operations data for 2007 and the consolidated balance sheet data as of December 31, 2008 has been derived from our audited consolidated financial statements not included in this Report. The consolidated statements of operations data for 2006 and the consolidated balance sheet data as of December 31, 2006 and 2007 have been derived from our unaudited 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. For purposes of the disclosure contained in this section, the company, we, us and our refer to Gevo, Inc. and Gevo Development, as the context requires, and include Agri-Energy following the completion of our acquisition on September 22, 2010.

Consolidated statements of operations data:	Years Ended December 31,				
	2006	2007	2008	2009	2010
Revenues:					
Grant revenue	\$ 100,000	\$ 275,000	\$ 208,000	\$ 660,000	\$ 1,493,000
Licensing revenue					138,000
Ethanol sales and related products					14,765,000
Total revenues	100,000	275,000	208,000	660,000	16,396,000
Cost of goods sold					(13,446,000)
Gross margin	100,000	275,000	208,000	660,000	2,950,000
Operating expenses:					
Research and development	(902,000)	(3,699,000)	(7,376,000)	(10,508,000)	(14,820,000)
Selling, general and administrative	(328,000)	(2,601,000)	(6,065,000)	(8,699,000)	(23,643,000)
Lease termination costs		(894,000)			
Loss on abandonment or disposal of assets		(243,000)	(78,000)	(22,000)	
Total operating expenses	(1,230,000)	(7,437,000)	(13,519,000)	(19,229,000)	(38,463,000)
Loss from operations	(1,130,000)	(7,162,000)	(13,311,000)	(18,569,000)	(35,513,000)
Other (expense) income:					
Interest expense	\$	\$ (140,000)	\$ (1,385,000)	\$ (1,103,000)	\$ (2,374,000)
Interest and other income	20,000	76,000	154,000	277,000	108,000
Loss from change in fair value of warrant liabilities(1)				(490,000)	(2,333,000)
Other (expense) income net	20,000	(64,000)	(1,231,000)	(1,316,000)	(4,599,000)
Net loss	(1,110,000)	(7,226,000)	(14,542,000)	(19,885,000)	(40,112,000)
Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock					(2,778,000)
Net loss attributable to Gevo, Inc. common stockholders	\$ (1,110,000)	\$ (7,226,000)	\$ (14,542,000)	\$ (19,885,000)	\$ (42,890,000)
	\$ (1.17)	\$ (7.40)	\$ (13.83)	\$ (18.07)	\$ (37.44)

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Net loss per share of common stock attributable to Gevo,  
Inc. stockholders, basic and diluted

Weighted-average number of common shares used in  
computing net loss per share of common stock, basic and  
diluted

950,000

976,909

1,051,848

1,100,294

1,145,500

- (1) On January 1, 2009, we changed the manner in which we account for warrants that are exercisable into preferred stock, as described in Note 11 to our consolidated financial statements.



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	As of December 31,				
Consolidated balance sheet data:	2006	2007	2008	2009	2010(1)
Cash and cash equivalents	\$ 1,005,000	\$ 63,000	\$ 9,635,000	\$ 21,240,000	\$ 15,274,000
Total assets	1,776,000	2,391,000	13,094,000	26,383,000	51,609,000
Fair value of warrant liabilities				982,000	2,034,000
Secured long-term debt, including current portion, net of debt discounts		1,579,000	8,178,000	7,701,000	20,432,000
Total liabilities	205,000	3,029,000	9,936,000	11,300,000	31,650,000
Accumulated deficit	(1,369,000)	(8,595,000)	(23,137,000)	(42,437,000)	(85,327,000)
Total stockholders' equity (deficit)	1,571,000	(638,000)	3,158,000	15,083,000	19,959,000

(1) Since Agri-Energy was acquired on September 22, 2010, our balance sheet as of December 31, 2010 includes Agri-Energy.

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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.*

#### Overview

We are a renewable chemicals and advanced biofuels company focused on the development and commercialization of alternatives to petroleum-based products. Our initial commercialization and development efforts are focused on isobutanol, a four carbon alcohol produced from renewable sources. Without any modification, our isobutanol has applications as a specialty chemical and a fuel blendstock. The potential global market for isobutanol as a specialty chemical is approximately 1.1 BGPY, and the potential global market for isobutanol as a fuel blendstock is approximately 40 BGPY.

Our isobutanol can also be converted by our customers into a wide variety of hydrocarbons which form the basis for the production of many products, including plastics, fibers, rubber and other polymers and hydrocarbon fuels, including jet and diesel fuel. We believe that products derived from isobutanol have potential applications in approximately 40% of the global petrochemicals market, representing a potential market for isobutanol of approximately 67 BGPY, and substantially all of the global hydrocarbon fuels market, representing a potential market for isobutanol of approximately 900 BGPY. We believe our breakthrough reduction in manufacturing cost will enable us to offer isobutanol at a price that makes isobutanol an attractive feedstock for a variety of these markets. When combined with a potential aggregate specialty chemical and fuel blendstock market for isobutanol of approximately 41.1 BGPY, this represents a potential global market for isobutanol of approximately 1,008 BGPY. Furthermore, our isobutanol and its derivatives are chemically identical to petroleum-derived products, except that they contain carbon from renewable sources, which we believe will reduce barriers to market adoption.

Our technology platform consists of proprietary biocatalysts and a proprietary isobutanol separation unit. Together these technologies form the Gevo Integrated Fermentation Technology®, or GIFT®. GIFT® is designed to allow relatively low capital expenditure retrofits of existing ethanol facilities, enabling a rapid and cost-efficient route to isobutanol production from a variety of renewable feedstocks. Our biocatalysts are microorganisms that have been designed to metabolize sugars to produce isobutanol. By August 2009, we had improved our first-generation biocatalyst's performance to equal or exceed our targeted levels of commercial performance, initially at our GIFT® mini-plant and then at our 10,000 gallon per year pilot plant in Englewood, Colorado. In September 2009, we replicated this performance by successfully completing the retrofit of a 1 MGPY ethanol demonstration facility located at ICM's St. Joseph, Missouri site.

To establish isobutanol production in a commercial industrial setting, we are now completing the development of our second-generation biocatalyst. We have transferred our proprietary isobutanol pathway to an industrially relevant yeast host and are currently optimizing the yeast's performance to achieve our commercial performance targets. As of October 2010, our second-generation biocatalyst has achieved a fermentation time of 52 hours and achieved approximately 94% of the theoretical maximum yield of isobutanol from feedstock, meeting our targeted fermentation performance criteria well in advance of our planned commercial launch of isobutanol production in the first half of 2012.

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. Meeting the conventional ethanol fermentation time is important because it allows us to lower capital expenditures by leveraging the existing ethanol infrastructure through retrofit of ethanol plants to isobutanol production. We developed our technology platform to be compatible with the existing approximately 20 BGPY of global operating ethanol production

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capacity. We believe that this retrofit approach will allow us to rapidly expand our isobutanol production capacity in response to customer demand and will be attractive to current ethanol plant owners due to the opportunity to increase their operating margins through the retrofit of their existing facilities in joint venture settings.

Our strategy is to commercialize our isobutanol for use directly as a specialty chemical and value-added fuel blendstock and for conversion into plastics, fibers, rubber, other polymers and hydrocarbon fuels. We intend to drive further adoption of our isobutanol in multiple US 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.

As we add to our customer pipeline by entering into isobutanol supply agreements with customers in the specialty chemicals, refining and transportation sectors both in the US and internationally, we plan to secure access to additional and larger scale existing ethanol production facilities through joint ventures or direct acquisitions. We will then work with ICM to deploy our technology platform through retrofit of these production facilities. A commercial engineering study completed by ICM in May 2010 estimated the capital costs associated with the retrofit of a standard 50 MGPY ICM-designed corn ethanol plant to be approximately \$22 to \$24 million, within a forecast confidence interval, and estimated the capital costs associated with the retrofit of a standard 100 MGPY ICM-designed corn ethanol plant to be approximately \$40 to \$45 million. These projected retrofit capital expenditures are substantially less than estimates for new plant construction for the production of advanced biofuels, including cellulosic ethanol. Notably, our calculations based on expected costs of retrofit, operating costs, volume of isobutanol production and price of isobutanol suggest that GIFT® retrofits will result in an approximately two-year payback period on the capital invested in the retrofit. The ICM study also projected that each retrofit process would take approximately 14 months to complete. We believe that our exclusive alliance with ICM will enhance our ability to rapidly deploy our technology on a commercial scale at future production facilities.

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 or direct acquisition.

For financial reporting purposes, we have determined that we have two operating segments. Our Gevo, Inc. Segment is responsible for all research and development activities related to the future production of isobutanol, maintaining and protecting our intellectual property portfolio, developing future markets for our isobutanol and providing corporate oversight services. Our Gevo Development/Agri-Energy Segment is responsible for the production of ethanol and related products.

At December 31, 2010, we were considered to be in the development stage as our primary activities, since incorporation, were conducting research and development, establishing our facilities, recruiting personnel, business development, business and financial planning and raising capital. Successful completion of our research and development program, and ultimately, the attainment of profitable operations are dependent upon future events, including completion of our development activities resulting in sales of isobutanol or isobutanol derived products and/or technology, obtaining adequate financing to complete our development activities, obtaining adequate financing to acquire access to and complete the retrofit of ethanol plants to isobutanol production, market acceptance and demand for our products and services, and attracting and retaining qualified personnel.

### ***Series D-1 Preferred Stock Issuance***

Between March and May 2010, we issued 1,843,675 shares of Series D-1 preferred stock at a price of \$17.12 per share for gross cash proceeds of approximately \$31,564,000 and issued 58,412 shares of Series D-1 preferred stock at \$17.12 per share in exchange for \$1,000,000 of future services to be provided by ICM. As of December 31, 2010, we had \$294,000 remaining on our prepaid credit with ICM. In aggregate, we issued a total

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of 1,902,087 shares of Series D-1 preferred stock at \$17.12 per share for total proceeds of \$32,564,000. These 1,902,087 shares of Series D-1 convertible preferred stock converted into 3,618,188 shares of our common stock upon completion of our initial public offering on February 14, 2011.

### ***Exclusive Supply Agreement with LANXESS***

On January 14, 2011, we entered into an exclusive supply agreement with LANXESS pursuant to which LANXESS has granted us an exclusive first right to supply LANXESS and its affiliates with certain of their requirements for biobased isobutanol during the term of the agreement. Our exclusive first right to supply biobased isobutanol to LANXESS and its affiliates will be subject to the terms of a supply agreement to be mutually agreed upon by the parties at a later date. Additionally, pursuant to the terms of the exclusive supply agreement we have granted LANXESS, subject to certain exceptions and conditions, (i) an exclusive first right to acquire our biobased isobutanol to produce isobutylene and butenes for use and sale in the field of chemicals, (ii) an exclusive right to use our isobutanol to produce butadiene and isobutylene for use in the production of polybutadiene and butyl rubber, and (iii) an exclusive right to use our isobutanol to produce isobutylene for use in the production of polyisobutylene. The initial term of the mutual exclusivity is ten years, subject to mutual extension.

### ***Agri-Energy Acquisition***

In September 2010, we acquired a 22 MGPY ethanol production facility in Luverne, Minnesota that we intend to retrofit to produce isobutanol. We paid a purchase price of \$20.6 million for property, plant and equipment and, in addition, we acquired and paid \$4.9 million for working capital. We paid the aggregate purchase price with available cash reserves and by borrowing \$12.5 million under our loan and security agreement with TriplePoint (as described in Management's Discussion and Analysis of Financial Condition and Results of Operations Liquidity and Capital Resources Secured long-term debt ). We have begun the project engineering and permitting portion of the Agri-Energy facility retrofit process. The Agri-Energy facility is a traditional dry-mill facility, which means that it uses dry-milled corn as a feedstock. Based on an initial evaluation of the Agri-Energy facility by ICM, we project capital costs of approximately \$17 million to retrofit this plant to produce 18 MGPY of isobutanol. We expect to incur additional costs of approximately \$5 million related to, among other things, the construction of equipment and storage tanks designed to allow switching between isobutanol and ethanol production and conservative engineering estimates made in acknowledgment that the Agri-Energy facility will be our first commercial retrofit, bringing the total projected cost to approximately \$22 million. We expect to begin commercial production of isobutanol at the Agri-Energy facility in the first half of 2012, and we plan to expand our production capacity beyond this facility to produce and sell over 350 million gallons of isobutanol in 2015.

We derive revenue from the sale of ethanol, distiller's grains and other related products produced as part of the ethanol production process and we expect that we will continue to record revenue from these sources during the period of the retrofit of the Agri-Energy facility to isobutanol production. Continued ethanol production during the retrofit will allow us to retain local staff for the future operation of the plant, maintain the equipment and generate cash flow. As the production of ethanol is not our intended business, we will continue reporting our operating results as a development stage company during the retrofit process and only intend to report revenue from the sale of ethanol on an interim basis until we begin to generate revenue from sales of isobutanol. Accordingly, the historical operating results of Agri-Energy and the operating results reported during the retrofit to isobutanol production will not be indicative of future operating results for Agri-Energy once isobutanol production commences.

Ethanol plant operations are highly dependent on commodity prices, especially prices for corn, ethanol, distiller's grains and natural gas. Because the market prices of these commodities are not always correlated, at times ethanol production may be unprofitable. As commodity price volatility poses a significant threat to our margin structure, we have implemented a risk management strategy focused on securing favorable operating margins. We monitor market prices of corn, natural gas and other input costs relative to the prices for ethanol and distiller's grains at Luverne, Minnesota, the location of the Agri-Energy facility. We also seek to create offsetting

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positions by using a combination of derivative instruments, fixed-price purchases and sales contracts or a combination of strategies. Our primary focus is not to manage general price movements, such as seeking to minimize the cost of corn consumed, but rather to lock in favorable profit margins whenever possible. By using a variety of risk management tools and hedging strategies we believe we will be able to maintain a disciplined approach to risk.

### ***Initial Public Offering***

On February 14, 2011, we completed our initial public offering issuing 8,222,500 shares of common stock at an offering price of \$15.00 per share, resulting in net proceeds, after deducting underwriting discounts and commissions but before expenses, of approximately \$114.7 million. Additionally, we incurred estimated offering costs of \$4.3 million related to the initial public offering. Upon the closing of the initial public offering, our outstanding shares of convertible preferred stock were automatically converted into 16,329,703 shares of common stock and our outstanding convertible preferred stock warrants were automatically converted into common stock warrants to purchase a total of 398,032 shares of common stock.

### **Revenues, Cost of Goods Sold and Operating Expenses**

#### ***Revenues***

Revenues relating to government research grants and cooperative agreements are recognized in the period during which the related costs are incurred, provided that the conditions under the awards have been met and only perfunctory obligations are outstanding.

We derive revenue from the sale of ethanol, distiller's grains and other products produced as part of the ethanol production process and we expect that we will continue to record revenue from these sources during the period of the retrofit of the Agri-Energy facility to isobutanol production. Revenue from the sale of ethanol and related products is recorded 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 of the revenue is reasonably assured.

#### ***Cost of Goods Sold and Gross Margin***

Our gross margin is derived from our total revenues less our cost of goods sold. Cost of goods sold includes costs for materials, direct labor and certain plant overhead costs.

#### ***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 expense includes 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. Upfront fees and milestone payments made under licensing agreements, payments for sponsored research and university research gifts to support research at academic institutions are recorded as research and development expense.

#### ***Selling, General and Administrative***

Selling, general and administrative expense consists of personnel costs (including stock-based compensation), hiring and training costs, consulting and service provider expenses (including patent counsel-related costs), 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, and travel and relocation expenses. Following completion of our initial public offering in February 2011, we anticipate incurring a significant increase in selling, general and administrative expense as we incur

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additional compliance costs as a public company. These increases will likely include increased costs for insurance, costs related to the hiring of additional personnel and payment to outside consultants, lawyers and accountants. We also expect to incur significant costs to comply with the corporate governance, internal controls and similar requirements applicable to public companies.

We also record selling, general and administrative expenses for the operations of the Agri-Energy facility that include administrative and oversight, labor, insurance and other operating expenses.

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

Our consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the US and include our accounts and the accounts of our wholly owned subsidiaries, Gevo Development and Agri-Energy. The preparation of our consolidated financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the applicable periods. Management bases its estimates, assumptions and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances. Different assumptions and judgments would change the estimates used in the preparation of our consolidated financial statements, which, in turn, could change the results from those reported. Our management evaluates its estimates, assumptions and judgments on an ongoing basis.

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.

### ***Stock-Based Compensation***

We account for share-based compensation using the provisions of Financial Accounting Standards Board ( FASB ) Accounting Standards Codification ( ASC ) 718, *Compensation - Stock Compensation*. Equity instruments are recognized at the grant-date fair value of the awards. We estimate the fair value of our share-based payment awards on the date of grant using the Black-Scholes option-pricing model and recognize the expense over the requisite service period of the awards on a straight-line basis.

We have accounted for stock options issued to nonemployees based on their estimated fair value determined using the Black-Scholes option-pricing method. The fair value of the options granted to nonemployees is re-measured as the services are performed and the options vest, and the resulting change in value, if any, is recognized as expense during the period the related services are rendered.

The following table summarizes the stock options granted from January 1, 2008 through December 31, 2010 with their exercise prices, the fair value of the underlying common stock and the intrinsic value per share, if any:

<b>Date of issuance</b>	<b>Number of options</b>	<b>Exercise price per share</b>	<b>Fair value</b>	<b>Intrinsic value</b>
January 7, 2008 to February 25, 2008	64,500	\$ 0.49	\$ 0.49	
June 12, 2008 to December 4, 2008	803,459	\$ 1.16	\$ 1.16	
November 16, 2009 to December 1, 2009	863,720	\$ 2.70	\$ 2.70	
June 3, 2010 to June 24, 2010	381,930	\$ 10.07	\$ 10.07	
September 10, 2010 to September 13, 2010	64,950	\$ 12.67	\$ 12.67	

### ***Significant Factors, Assumptions and Methodologies used in Determining Fair Value***

We have estimated the fair value of our stock option grants using the Black-Scholes option-pricing method. 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

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price volatility assumption as more historical data for our common stock becomes available. Due to our limited history of grant activity, we calculate the expected life of options granted using the simplified method permitted by the SEC as the arithmetic average of the total contractual term of the option and its vesting period. The risk-free interest rate assumption was based on the US Treasury yield curve in effect during the year of grant for instruments with a term similar to the expected life of the related option. No dividends are expected to be paid. Forfeitures have been estimated by us based upon our historical and expected forfeiture experience.

The fair value of stock options granted in the years ended December 31, 2008, 2009 and 2010, were estimated using the following assumptions:

	Options granted in year 2008		Options granted in year 2009		Options granted in year 2010	
Risk-free interest rate	1.92%	4.43%	2.15%	2.55%	1.85%	2.53%
Expected dividend yield	None		None		None	
Expected volatility factor	70%	75%	76%	80%	76%	80%
Expected option life (in years)	4.87	6.08	5.08	6.07	5.00	6.08
Expected forfeitures	0%	5%	0%	5%	0%	5%

We recognized a total of \$207,000 in stock-based compensation expense during 2008, of which \$140,000 was attributable to employee stock options and \$67,000 was attributable to nonemployee stock options and restricted stock. We recognized a total of \$945,000 in stock-based compensation expense during 2009, of which \$797,000 was attributable to employee stock options and \$148,000 was attributable to nonemployee stock options and restricted stock. We recognized a total of \$11,285,000 in stock-based compensation expense during 2010, of which \$2,342,000 was attributable to employee stock options, \$318,000 was attributable to nonemployee stock options and restricted stock, and \$8,625,000 was attributable to the warrant issued to CDP and the purchase of the 10% minority interest in Gevo Development held by CDP pursuant to an equity purchase agreement. Historically, many of our stock option grants have contained a provision providing for vesting from the grantee's date of hire. During the fourth quarter of 2009, we granted options to purchase 863,720 shares of common stock at a price of \$2.70 per share. During 2010, we granted options to purchase 381,930 shares of common stock at a price of \$10.07 per share and 64,950 shares of common stock at a price of \$12.67 per share. Because vesting for many of these grants commenced from the grantee's date of hire, most of these grants were partially vested on the grant date resulting in a charge of approximately \$558,000 and \$1,205,000 during 2009 and 2010, respectively, for the portion of the grants that was vested as of the grant date.

**Common Stock Valuations**

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* (AICPA Practice Aid). In addition, we exercised judgment in evaluating and assessing the foregoing based on several factors including:

the nature and history of our business;

our historical operating and financial results;

the market value of companies that are engaged in a similar business to ours;

the lack of marketability of our common stock;

the price at which shares of our preferred stock have been sold;

the liquidation preference and other rights, privileges and preferences associated with our preferred stock;

our progress in developing our isobutanol production technology;



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our progress towards achieving commercial performance targets for our bacteria and yeast based biocatalysts;

our progress towards producing isobutanol at the 1 MGPY development plant scale;

the risks associated with transferring our isobutanol production technology to full commercial scale settings;

the overall inherent risks associated with our business at the time stock option grants were approved; and

the overall equity market conditions and general economic trends.

We considered the factors outlined above, as well as the results of independent outside valuations performed as of the dates listed in the table below, in determining the underlying fair value of our common stock at September 30, 2007 after the completion of our Series B preferred stock financing, at March 13, 2008 after completion of our Series C preferred stock financing, at August 31, 2009 after completion of our Series D preferred stock financing, at March 31, 2010 after completion of our initial closing of our Series D-1 preferred stock financing, at August 31, 2010, at September 30, 2010 and at December 31, 2010. We used an option-pricing method, as well as other factors outlined above, to estimate the fair value of our common stock as follows:

Valuation date	Fair value per share
September 30, 2007	\$ 0.49
March 13, 2008	1.16
August 31, 2009	2.70
March 31, 2010	10.07
August 31, 2010	12.67
September 30, 2010	18.97
December 31, 2010	14.90

In November 2007, we completed a valuation to estimate the fair market value of a share of our common stock as of September 30, 2007 using the option-pricing method. To determine our estimated enterprise value, we applied an asset-based approach and a market-based approach based on the investment in our preferred stock by venture capital firms, including the issuance of 1,027,397 shares of Series B preferred stock at a price of \$2.92 per share in July 2007. We used the option-pricing method to allocate the estimated enterprise value between common and preferred stockholders. We used a volatility of 70.3% based upon two years of data from a set of comparable public company stocks. Applying an appropriate risk free interest rate of 4.21% and a 50% discount for the lack of marketability of our common stock, we estimated a fair market value at September 30, 2007 of \$0.49 per common share. We used this fair market value per common share for stock options granted through February 25, 2008.

In April 2008, we completed a valuation to estimate the fair market value of a share of our common stock as of March 13, 2008 using the option-pricing method. To determine our estimated enterprise value, we applied a market-based approach based on the investment in our preferred stock by venture capital firms, including the issuance of 3,102,190 shares of Series C preferred stock at a price of \$5.48 per share in March 2008. We used the option-pricing method to allocate the estimated enterprise value between common and preferred stockholders. We used a volatility of 83.7% based upon three years of data from a set of comparable public company stocks. Applying an appropriate risk free interest rate of 1.84% and a 49% adjustment for the lack of marketability of our common stock, we estimated a fair market value at March 13, 2008 of \$1.16 per common share. We used this fair market value per common share for options granted between June 12, 2008 and December 4, 2008.

In September 2009, we completed a valuation to estimate the fair market value of a share of our common stock as of August 31, 2009 using the option-pricing method. To determine our estimated enterprise value, we applied a market-based approach based on the investment in our preferred stock by venture capital firms and strategic investors, including the issuance of 4,616,483 shares of Series D preferred stock at a price of \$7.04 per



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share between April and August 2009. We used the option-pricing method to allocate the estimated enterprise value between common and preferred stockholders. We used a volatility of 83.63% based upon two years of data from a set of comparable public company stocks. Applying an appropriate risk free interest rate of 0.97% and a 40% discount for the lack of marketability of our common stock, we estimated a fair market value at August 31, 2009 of \$2.70 per common share. We used this fair market value per common share for options granted between November 16, 2009 and December 1, 2009.

In May 2010, we completed a valuation to estimate the fair market value of a share of our common stock as of March 31, 2010 using the option-pricing method. We first estimated our enterprise value and then allocated this value to the underlying classes of equity using the option-pricing method as outlined in the AICPA Practice Aid. In estimating the enterprise value, we used a scenario analysis incorporating probabilities of future events for existing stockholders of an initial public offering, merger/acquisition ( M&A ), or an orderly liquidation to calculate an overall estimated enterprise value of the company. To calculate the enterprise value in the initial public offering and M&A scenarios, we used an income approach which incorporated a discounted cash flow valuation. This approach requires a projection of the cash flows that the business expects to generate over a forecast period and an estimate of the present value of cash flows beyond that period, which is referred to as terminal value. These cash flows are converted to present value by means of discounting, using a rate of return that accounts for the time value of money and the appropriate degree of risks inherent in the business. The orderly liquidation scenario considered the total preferences of the preferred stockholders assuming no further rounds of financing after Series D-1. To allocate the enterprise value to the underlying classes of equity, we used the option-pricing method. Within the allocation model, we estimated a time until liquidity event of six months, a risk-free discount rate of 0.24% and a volatility input of 59.79% based upon 6 months of data from a set of comparable public company stocks. We estimated a fair market value at March 31, 2010 of \$10.07 per common share.

In September 2010, we completed a valuation to estimate the fair market value of a share of our common stock as of August 31, 2010 using the same methodology that we used for our valuation as of March 31, 2010. We estimated a fair value at August 31, 2010 of \$12.67 per common share.

In October 2010, we completed a valuation to estimate the fair market value of a share of our common stock as of September 30, 2010 using the same methodology that we used for our valuations as of March 31, 2010 and August 31, 2010. We estimated a fair value at September 30, 2010 of \$18.97 per common share. For the August 31, 2010 and September 30, 2010 valuations, we used the following assumptions: risk free interest rate of 0.15%, expected volatility of between 49.14% and 61.90%, and an expected time to a liquidity event of 0.17 years.

In February 2011, we completed a valuation to estimate the fair market value of a share of our common stock as of December 31, 2010 using the same methodology that we used for our valuations performed in 2010. We estimated a fair value at December 31, 2010 of \$14.90 per common share. For the December 31, 2010 valuation, we used the following assumptions: risk free interest rate of 0.07%, expected volatility of 49.14%, and an expected time to a liquidity event of 0.08 years.

No single event caused the valuation of our common stock to increase from January 2008 to December 2010; rather, it was a combination of the following factors that led to the changes in the fair value of the underlying common stock:

We completed our Series C financing in March 2008. The value of the company negotiated during this financing, led by two new investors, took into account our license agreement signed with The Regents during the fall of 2007.

We completed our Series D financing between April and August 2009. The value of the company negotiated during this financing, led by a new investor, took into account the operation of our pilot plant located at our facility in Colorado during 2008, our partnership with ICM that was entered into in 2008, improvements in our first-generation biocatalyst and construction of our demonstration plant in St. Joseph, Missouri.

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We completed our Series D-1 financing between March and May 2010. The value of the company negotiated during this financing took into account several recent developments including commissioning our demonstration plant in St. Joseph, Missouri during September 2009, the establishment of Gevo Development in September 2009 in order to focus on accessing, financing and developing ethanol facilities for future retrofit to isobutanol production, significant improvements in the isobutanol yield of our second-generation biocatalyst and our entering into a number of letters of interest with potential future customers.

We completed the acquisition of Agri-Energy in September 2010 gaining access to our first commercial facility for future retrofit to isobutanol production.

As of October 2010, our second-generation biocatalyst had achieved a fermentation time of 52 hours and achieved approximately 94% of the theoretical maximum yield of isobutanol from feedstock, meeting our targeted fermentation performance criteria well in advance of our planned commercial launch of isobutanol production in the first half of 2012.

There is inherent uncertainty in these estimates and if we had made different assumptions than those described above, the amount of our stock-based compensation expense, net loss and net loss per share amounts could have been significantly different.

***Estimation of Fair Value of Warrants to Purchase Preferred Stock***

Effective January 1, 2009 upon the adoption of FASB ASC 815, *Derivatives and Hedging*, all warrants issued by us that were exercisable into preferred stock were accounted for as derivatives and recognized in our consolidated balance sheets as fair value of warrant liabilities at their estimated fair value. As such, effective January 1, 2009, we reclassified the fair value of these preferred stock warrants from equity to liability status as if these warrants had been recorded as a derivative liability since their dates of issuance. We determined that this treatment was appropriate because the preferred stock underlying the warrants had down-round protection. As a result of this change in accounting principle, on January 1, 2009, we recorded these liabilities at their fair value of \$289,000.

As of December 31, 2009 and 2010, the fair value of preferred stock warrants was estimated to be \$982,000 and \$2,034,000, respectively, using an option-pricing model. We recorded a \$490,000 and \$2,333,000 non-cash charge related to the change in fair value of preferred stock warrants for the years ended December 31, 2009 and 2010, respectively. These warrant liabilities were marked to fair value from January 1, 2009 resulting in the recognition of gain or loss in our consolidated statements of operations as gain or loss from change in fair value of warrant liabilities from that date.

Preferred stock warrants were initially issued by us in connection with the issuance of secured long-term debt and convertible promissory notes. The warrants were not issued with the intent of effectively hedging any exposures to cash flow, market or foreign currency risks. The warrants do not qualify for hedge accounting, and as such, all future changes in the fair value of these warrants will be recognized currently in earnings until such time as the warrants are exercised, expire or convert to common stock warrants, such as the conversion that occurred upon the completion of our initial public offering on February 14, 2011. The warrants do not trade in an active market, and as such, we estimated the fair value of these warrants using an option-pricing model with the following assumptions:

	January 1, 2009	December 31, 2009	December 31, 2010
Risk-free interest rate	1.00%	1.14%	0.07%
Expected volatility factor	67.50%	91.60%	49.14%
Expected time to a liquidity event (in years)	3	2	0.08

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During the year ended December 31, 2009, we granted an additional warrant to Lighthouse to acquire 55,000 shares of our Series D preferred stock with an exercise price of \$7.04, and an additional warrant to acquire 416 shares of our Series C preferred stock with an exercise price of \$5.48. In connection with signing and borrowing under the loan agreements with TriplePoint, we issued warrants to TriplePoint in August and September 2010 to acquire a total of 105,140 shares of our Series D-1 preferred stock in the aggregate with an exercise price of \$17.12 per share. In September 2010, Khosla Ventures I, LP exercised their warrant to purchase 108,076 shares of Series C preferred stock at an exercise price of \$5.48 per share resulting in total proceeds to us in the amount of \$592,000. Upon exercise of the warrant, we reclassified \$1,458,000 from preferred stock warrant liability to equity. Due to the nature of these derivative instruments, the instruments contain no credit-risk-related contingent features.

To value our preferred stock warrants as of December 31, 2010, we first estimated our enterprise value and then allocated this value to the underlying classes of equity using the option-pricing method as outlined in the AICPA Practice Aid. In estimating the enterprise value, we used a scenario analysis incorporating probabilities of future events for existing stockholders of an initial public offering, M&A transaction, or liquidation to calculate an overall estimated enterprise value of the company using the option-pricing method. To calculate the enterprise value in the initial public offering and M&A scenarios, we used an income approach which incorporated a discounted cash flow valuation. This approach requires a projection of the cash flows that the business expects to generate over a forecasted period and an estimate of the present value of cash flows beyond that period, which is referred to as terminal value. These cash flows are converted to present value by means of discounting, using a rate of return that accounts for the time value of money and the appropriate degree of risks inherent in the business. The orderly liquidation scenario considered the total preferences of the preferred stockholders assuming no further rounds of financing after our Series D-1. To allocate the enterprise value to the underlying classes of equity, we used the option-pricing method. Within the allocation model, we estimated a time until liquidity event of one month, a risk-free discount rate of 0.07% and a volatility input of 49.14%.

There is inherent uncertainty in these estimates and if we had made different assumptions than those described above, the amount of our loss on change in fair value of preferred stock warrants, net loss and net loss per share amounts could have been significantly different.

The table below summarizes the preferred stock warrants that were issued by us and recorded as a liability as of January 1, 2009, December 31, 2009 and December 31, 2010.

Type of preferred stock warrants	Year(s) of issuance	Number of warrant shares originally granted	Number of warrant shares outstanding at December 31, 2010	Exercise price	Issuance date original value assigned	Fair value of warrants outstanding at January 1, 2009	Fair value of warrants outstanding at December 31, 2009	Fair value of warrants outstanding at December 31, 2010
Series A-3 preferred stock warrant	2006, 2007	15,000	15,000	\$ 1.75	\$ 18,000	\$ 30,000	\$ 68,000	\$ 197,000
Series A-4 preferred stock warrant	2007, 2008	15,021	15,021	2.33	27,000	27,000	65,000	189,000
Series C preferred stock warrant	2008, 2009	113,012(1)	113,012	5.48	432,000	118,000	356,000	1,065,000
Series C preferred stock warrant	2008	108,076(1)		5.48	398,000	114,000	341,000	
Series D preferred stock warrant	2009	55,000	55,000	7.04	202,000		152,000	432,000
Series D-1 preferred stock warrant	2010	105,140	105,140	17.12	177,000			151,000
		411,249	303,173(2)		\$ 1,254,000	\$ 289,000	\$ 982,000	\$ 2,034,000

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- (1) In September 2010, Khosla Ventures I, LP exercised their warrant to purchase 108,076 shares of Series C preferred stock at a price of \$5.48 per share. As such, there were 113,012 Series C preferred stock warrants outstanding at December 31, 2010.
- (2) These 303,173 warrants became exercisable for 398,032 shares of our common stock upon completion of our initial public offering on February 14, 2011.

Upon the closing of our initial public offering on February 14, 2011 and the conversion of the underlying preferred stock to common stock, all outstanding warrants to purchase shares of preferred stock converted into warrants to purchase shares of our common stock. The then-current aggregate fair value of these warrants will be reclassified from liabilities to additional paid-in capital, a component of stockholders' equity, and we will cease to record any related periodic fair value adjustments.

### ***Beneficial Conversion Feature of Series D-1 Preferred Stock Financing***

Each share of Series D-1 preferred stock is convertible into the number of shares of common stock determined by dividing the original issue price of the Series D-1 of \$17.12, as adjusted, by the conversion price of the Series D-1 in effect at the time of conversion. The initial conversion price for the Series D-1 is \$17.12, resulting in an initial conversion ratio that is one share of Series D-1 preferred stock for one share of common stock. In addition to the conversion price adjustments that are applicable to the other series of preferred stock, including, but not limited to, adjustments in connection with stock splits and dilutive events, the conversion price of the Series D-1 adjusts upon the closing of an initial public offering or a qualified financing. If an initial public offering or qualified financing had closed on or prior to December 31, 2010, the conversion price of the Series D-1 would have been adjusted to an amount equal to 75% of the offering price per share or price per share paid by investors in a qualified financing. If an initial public offering or qualified financing were to close between January 1, 2011 and September 30, 2011, the conversion price of the Series D-1 would adjust to an amount equal to 60% of the offering price per share or price per share paid by investors in a qualified financing. If an initial public offering or qualified financing had not occurred by September 30, 2011, then the conversion ratio would adjust such that each share of Series D-1 preferred stock would be convertible into two shares of common stock. On February 14, 2011, we completed our initial public offering of 8,222,500 shares of common stock at an offering price of \$15.00 per share. Based on the timing of the offering and the offering price of \$15.00 per share, the conversion rate was calculated as 1.9022 shares of common stock for each share of Series D-1 preferred stock.

Because the conversion ratio adjustments described above are unique to the Series D-1 preferred, the Series D-1 preferred was considered to have a beneficial conversion feature. In order to calculate the value of this beneficial conversion feature, we compared the Series D-1 preferred issuance price of \$17.12 to the estimated fair value of two shares of common stock of \$20.14, as of the original issue dates of the Series D-1 preferred (representing the conversion rate of the Series D-1 preferred if an initial public offering or qualified financing had not occurred by September 30, 2011). On the basis of this comparison, the company recorded an amount representing the intrinsic value of the beneficial conversion feature of \$3.02 per share, or the difference between \$20.14 and \$17.12. As the company issued a total of 1,902,087 shares of Series D-1 preferred between March and May 2010, it recorded the beneficial conversion feature at its aggregate intrinsic value of approximately \$5,744,000 (1,902,087 shares multiplied by \$3.02 per share) as a discount on the Series D-1 preferred with a corresponding credit to additional paid-in-capital.

For the period from January 1, 2011 to the closing of our initial public offering on February 14, 2011, we recorded a deemed dividend amortization of beneficial conversion feature on our Series D-1 convertible preferred stock of \$495,000. Upon closing of our initial public offering on February 14, 2011 and the automatic conversion of our Series D-1 preferred stock to common stock, we recalculated the intrinsic value of the beneficial conversion feature using the adjusted conversion ratio applied against the original commitment-date estimated fair value of the underlying common stock. The amount of the recalculated intrinsic value of the beneficial conversion feature exceeded the previously amortized amount of the beneficial conversion feature by

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\$599,000, which amount was immediately amortized to retained earnings and additional paid-in-capital contemporaneously with the closing of the initial public offering on February 14, 2011. Other than the entries recorded through, and upon, the closing of our initial public offering, no additional amortization of the beneficial conversion feature relating to our Series D-1 preferred stock will be recorded.

### ***Revenue Recognition***

Following consummation of the Agri-Energy acquisition on September 22, 2010, we record revenue from the sale of ethanol and related products. We recognize revenue 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. In accordance with our agreements for the marketing and sale of ethanol and related products, commissions due to marketers are deducted from the gross sales price at the time payment is remitted. Ethanol and related products sales are recorded net of commissions.

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

Intercompany revenues are eliminated on a consolidated basis for reporting purposes. There were no intercompany revenues to eliminate through December 31, 2010.

### ***Cost of Goods Sold***

Cost of goods sold includes costs for materials, direct labor and certain plant overhead costs. Direct materials consist of the costs of corn feedstock, denaturant and process chemicals. Direct labor includes compensation of non-management personnel involved in the operation of the ethanol plant. Plant overhead costs primarily consist of plant utilities and plant depreciation. Cost of goods sold is mainly affected by the cost of corn and natural gas. Corn is the most significant raw material cost. We purchase natural gas to power steam generation in the ethanol production process and to dry the distiller's grains. Cost of goods sold also includes net gains or losses from derivatives relating to corn and natural gas.

We enter into forward purchase contracts for corn and natural gas as a means of securing corn and natural gas used in ethanol production. We also enter into exchange-traded futures contracts for corn as a means of managing exposure to changes in corn prices. These transactions are considered to be derivatives and are recorded on the balance sheet as assets and liabilities based on each derivative's fair value. Changes in the fair value of the derivative contracts are recognized currently in income, as a component of cost of goods sold, unless specific hedge accounting criteria are met. We have not designated any of our derivatives as hedges for financial reporting purposes.

### ***Inventory***

Corn, ethanol, distiller's grains, enzymes and other inventory items are stated at the lower of cost or market value. Cost is determined by the first-in, first-out method. Ethanol inventory cost consists of the applicable share of raw material, direct labor and manufacturing overhead costs.

### ***Derivatives and Hedging***

Our activities, through our Gevo Development/Agri-Energy Segment, expose us to a variety of market risks, including the effects of changes in commodity prices. These financial exposures are monitored and managed by our management as an integral part of our overall risk-management program. Our risk management program

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focuses on the unpredictability of financial and commodities markets and seeks to reduce the potentially adverse effects that the volatility of these markets may have on our operating results.

We periodically enter into forward purchase contracts for corn and natural gas to ensure supply and manage the prices of these commodities. These contracts are considered to be derivative transactions, are valued at market price and are recorded as derivative assets or derivative liabilities in the consolidated balance sheet. Changes in market price are recorded in cost of goods sold.

We generally follow a policy of using exchange-traded futures contracts to reduce our net position in merchandisable agricultural commodity inventories and forward cash purchase contracts to reduce price risk. Exchange-traded futures contracts are valued at market price and are recorded as derivative assets or derivative liabilities on the consolidated balance sheet and changes in market price are recorded in cost of goods sold.

Our derivatives do not include any credit risk related contingent features. For the exchange-traded contracts, we maintain a margin deposit. We will not enter into these derivative financial instruments for trading or speculative purposes, and we have not designated any of our derivatives as hedges for financial accounting purposes.

### ***Impairment of Long-lived Assets***

In accordance with FASB ASC 360, *Property, Plant, and Equipment*, we assess impairment of long-lived assets, which include property, plant and equipment, for recoverability when events or changes in circumstances indicate that their carrying amount may not be recoverable. Circumstances 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; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use 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.

Given our current period cash flow combined with a history of operating losses, we evaluated the recoverability of the book value of our property, plant and equipment. We performed an undiscounted cash flow analysis, the results of which indicate that the sum of the undiscounted cash flows is substantially in excess of the book value of the property, plant and equipment. Accordingly, no impairment charges have been recorded during the period from June 9, 2005 (date of inception) to December 31, 2010.

Prior to the acquisition of Agri-Energy, our property, plant and equipment were substantially comprised of laboratory and related equipment used in our demonstration plant in St. Joseph, Missouri and our pilot plant and laboratories in Englewood, Colorado. This equipment is used directly in the development and testing of our technology, including our proprietary separation process and biocatalysts, and the testing of isobutanol that we produce. Any resulting technological improvements are incorporated into our retrofit and production processes. We believe our laboratory equipment and demonstration plant will continue to have future utility, as we intend to continue using it to test and develop enhancements to our retrofit and production processes, in support of our acquired operations at Agri-Energy and any additional ethanol production facilities that we enter into joint ventures with or acquire, and to test the methods and feasibility of converting the isobutanol that we produce into a variety of renewable products in support of our future commercialization efforts. Accordingly, we have based our undiscounted cash flow analysis on the cash flows that we anticipate from these future operations.

Upon our acquisition of Agri-Energy on September 22, 2010, we recorded the acquired property, plant and equipment at their fair values. The Agri-Energy acquired property, plant and equipment constitute a majority of our total property, plant and equipment.

We have not yet generated positive cash flows from operations, and such cash flows may not materialize for a significant period in the future, if ever. Additionally, we may make changes to our business plan that will result in changes to the expected cash flows from long-lived assets. As a result, it is possible that future evaluations of long-lived assets may result in impairment.



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We make estimates and judgments about future undiscounted cash flows. Although our cash flow forecasts are based on assumptions that are consistent with our plans, there is significant exercise of judgment involved in determining the cash flow attributable to a long-lived asset over its estimated remaining useful life. As a result, the carrying amounts of our long-lived assets could be reduced through impairment charges in the future.

**Result of Operations****Comparison of years ended December 31, 2009 and 2010**

	Year Ended December 31, 2009	Year Ended December 31, 2010	\$ Increase (decrease)	% Change
Revenue:				
Grant revenue	\$ 660,000	\$ 1,493,000	\$ 833,000	126%
Licensing revenue		138,000	138,000	N/A
Ethanol sales and related products		14,765,000	14,765,000	N/A
Total revenues	660,000	16,396,000	15,736,000	2,384%
Cost of Goods Sold		(13,446,000)	13,446,000	N/A
Gross Margin	660,000	2,950,000	2,290,000	347%
Operating Expenses:				
Research and development	(10,508,000)	(14,820,000)	4,312,000	41%
Selling, general and administrative	(8,699,000)	(23,643,000)	14,944,000	172%
Loss on abandonment or disposal of assets	(22,000)		(22,000)	(100%)
Total operating expenses	(19,229,000)	(38,463,000)	19,234,000	100%
Loss from operations	(18,569,000)	(35,513,000)	16,944,000	91%
Other (expense) income:				
Interest expense	(1,103,000)	(2,374,000)	1,271,000	115%
Interest and other income	277,000	108,000	(169,000)	(61%)
Loss from change in fair value of warrant liabilities	(490,000)	(2,333,000)	1,843,000	376%
Other expense net	(1,316,000)	(4,599,000)	3,283,000	249%
Net loss attributable to Gevo, Inc. common stockholders	(19,885,000)	(40,112,000)	20,227,000	102%
Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock		(2,778,000)	2,778,000	N/A
Net loss attributable to Gevo, Inc. common stockholders	\$ (19,885,000)	\$ (42,890,000)	\$ 23,005,000	116%

**Revenues:** The increase in ethanol sales and related products of \$14,765,000 is due to our acquisition of Agri-Energy on September 22, 2010. The increase in grant revenue of \$833,000, or 126%, primarily relates to additional awards from the US Department of Agriculture and the Army Research Laboratory that commenced in the fourth quarter of 2009. The increase in licensing revenue of \$138,000 relates to our licensing of certain materials.

**Cost of goods sold and gross margin:** The increase in cost of goods sold of \$13,446,000 relates to our acquisition of Agri-Energy on September 22, 2010. Prior to our acquisition of Agri-Energy, we did not incur or report cost of goods sold. Cost of goods sold includes costs for

direct labor, materials and certain plant overhead costs. Our gross margin is derived from our total revenues less our cost of goods sold.

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*Research and development:* The increase in research and development expense of \$4,312,000, or 41%, was primarily driven by increased payroll and related expenses of \$971,000, increased stock-based compensation of \$408,000, an increase in depreciation expense of \$1,123,000, which includes depreciation of equipment at our demonstration facility, and achievement of milestones under our licensing agreement with Cargill for an increase of \$646,000. Our overall research and development expense also reflected an increase in laboratory supplies and services of \$873,000 and an increase of \$483,000 related to increased levels of consulting and contract research activity, including work under our contractor and development agreements with VIB, Caltech, UCLA and Cargill, partially offset by a decrease in operating expenses at our demonstration plant at St. Joseph, Missouri in the amount of \$303,000. Research and development expense includes stock-based compensation expense of \$274,000 and \$682,000 in 2009 and 2010, respectively.

*Selling, general and administrative:* The increase in selling, general and administrative expense of \$14,944,000, or 172%, was primarily driven by an increase in stock-based compensation expense of \$9,934,000 and legal fees of \$1,734,000. Selling, general and administrative expense included stock-based compensation expense of \$671,000 and \$10,603,000 in 2009 and 2010, respectively. Included in the \$10,603,000 of stock-based compensation in selling, general and administrative expense for the year ended December 31, 2010 is \$7,851,000 related to the warrant issued to CDP and \$774,000 related to the purchase of the 10% minority interest in Gevo Development from CDP, both of which are described in Notes 6 and 13 to our consolidated financial statements. The increase in legal fees related primarily to our acquisition of Agri-Energy, legal expenses to support our intellectual property positions and other general legal fees. We also incurred increased payroll and related expenses, including relocation and recruiting, but excluding stock-based compensation, of \$1,398,000, increased our use of consultants resulting in an increased consulting expense of \$519,000 and incurred higher management fees to CDP of \$188,000. In addition, we reported increases in travel and related costs, public relations, and plant diligence costs of \$866,000 in the aggregate.

*Interest expense:* Interest expense increased by \$1,271,000, or 115%, due to the incurrence of additional debt, higher interest rates on our secured long-term debt facility and higher amortization of debt discounts and debt issue costs related to our debt with Lighthouse and TriplePoint. In August 2010, we paid off a portion of our Lighthouse debt, consisting of \$5,000,000 in principal and \$250,000 in final payment, which resulted in accelerating the recognition of \$332,000 of debt discounts to non-cash interest expense.

*Interest and other income:* The decrease in interest and other income of \$169,000, or 61%, is primarily due to \$144,000 received in 2009 under a Colorado state incentive program related to local jobs creation in connection with our relocation from Pasadena, California to Englewood, Colorado.

*Loss from change in fair value of warrant liabilities:* The increase in loss from change in fair value of warrant liabilities of \$1,843,000, or 376%, related to the change in the fair value of our preferred stock warrants, which were recorded as derivatives and recognized in our consolidated balance sheet as a liability during 2010.

*Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock:* The increase in deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock of \$2,778,000 related to our issuance of Series D-1 convertible preferred stock between March and May 2010.

**Table of Contents***Comparison of years ended December 31, 2008 and 2009*

	Year ended December 31, 2008	Year ended December 31, 2009	\$ increase (decrease)	% Change
Revenue	\$ 208,000	\$ 660,000	\$ 452,000	217%
Operating expenses:				
Research and development	(7,376,000)	(10,508,000)	3,132,000	42%
Selling, general and administrative	(6,065,000)	(8,699,000)	2,634,000	43%
Loss on abandonment or disposal of assets	(78,000)	(22,000)	(56,000)	(72%)
Total operating expenses	(13,519,000)	(19,229,000)	5,710,000	42%
Loss from operations	(13,311,000)	(18,569,000)	5,258,000	40%
Other (expense) income:				
Interest expense	(1,385,000)	(1,103,000)	(282,000)	(20%)
Interest and other income	154,000	277,000	123,000	80%
Loss from change in fair value of warrant liabilities		(490,000)	490,000	N/A
Other expense net	(1,231,000)	(1,316,000)	85,000	7%
Net loss attributable to Gevo, Inc. common stockholders	\$ (14,542,000)	\$ (19,885,000)	\$ 5,343,000	37%

*Revenues:* The increase in revenue of \$452,000, or 217%, is primarily related to increased activity under our ongoing awards and an additional grant from the EPA.

*Research and development:* The increase in research and development expense of \$3,132,000, or 42%, was primarily due to additional resources deployed for development of our biocatalysts and the operation of our demonstration facility in St. Joseph, Missouri. The increase included \$824,000 for sponsored research under our agreements with The Regents and VIB, upfront and milestone amounts totaling \$875,000 under our Cargill license agreement, and \$771,000 and \$529,000 of operating expenses and depreciation expense, respectively, relating to our demonstration facility in St. Joseph, Missouri. Research and development expenses included stock-based compensation expense of \$106,000 and \$274,000 in 2008 and 2009, respectively.

*Selling, general and administrative:* The increase in selling, general and administrative expense of \$2,634,000, or 43%, reflected the hiring of additional personnel to support the growth in our business and related expenses, legal expenses to support our intellectual property positions and establishment of our subsidiary Gevo Development in September 2009. Our personnel costs, including costs for initial hiring of executives with specialized knowledge of our industry, and expenses for stock-based compensation increased approximately \$1,808,000. Selling, general and administrative expense included stock-based compensation expense of \$101,000 and \$671,000 in 2008 and 2009, respectively. We increased our spending on legal expenses by \$145,000 as we developed our intellectual property portfolio. Gevo Development incurred expenses of \$731,000, including initial costs related to start up activities, in 2009. Partially offsetting these increases in selling, general and administrative expense in 2009 were costs incurred for relocation of our primary business offices and operations from Pasadena, California to Englewood, Colorado of \$706,000 that we recorded in selling, general and administrative expense in 2008.

*Loss on abandonment or disposal of assets:* Loss on abandonment or disposal of assets in 2008 primarily represents abandoned assets as a result of the relocation of our primary business offices from Pasadena, California to Englewood, Colorado. Loss on abandonment or disposal of assets in 2009 represents disposal of obsolete equipment.

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*Interest expense:* The net decrease in interest expense of \$282,000, or 20%, is primarily due to debt discounts recorded on our convertible promissory notes that were fully amortized to interest expense in 2008, partially offset by increases in interest expense relating to our secured debt facility. Interest expense related to our Lighthouse facility was \$332,000 and \$1,103,000 in 2008 and 2009, respectively. The increase in interest expense related to our Lighthouse debt facility reflected a higher debt balance outstanding throughout 2009 and issuance of warrants in 2009 related to a modification of our terms with Lighthouse in July 2009. During January 2008, we issued \$3,000,000 of convertible promissory notes with warrants to existing investors. Debt discounts recorded against these convertible promissory notes of approximately \$1,010,000 for the fair value assigned to the warrants and a beneficial conversion feature associated with the conversion feature of the notes were fully amortized to interest expense upon the conversion of the notes to Series C preferred stock in March 2008.

*Interest and other income:* Interest and other income increased by \$123,000, or 80%, primarily due to \$144,000 received in 2009 under a Colorado state incentive program related to local jobs creation in connection with our relocation from Pasadena, California to Englewood, Colorado.

*Loss from change in fair value of warrant liabilities:* The increase in loss from change in fair value of warrant liabilities of \$490,000 relates to our preferred stock warrants, which were reclassified from equity to derivative liabilities effective January 1, 2009 and recognized in our consolidated balance sheet as a liability.

## Liquidity and Capital Resources

On February 14, 2011, we completed our initial public offering issuing 8,222,500 shares of common stock at an offering price of \$15.00 per share, resulting in net proceeds, after deducting underwriting discounts and commissions but before expenses, of approximately \$114.7 million.

From inception to December 31, 2010, we have funded our operations primarily through an aggregate of \$89,068,000 from the sale of preferred equity securities, \$26,578,000 in borrowings under our secured debt financing arrangements and \$17,639,000 from revenues. To date, we have not generated any revenues from the sale of isobutanol.

As of December 31, 2010, our cash and cash equivalents totaled \$15,274,000. Between March and May 2010, we issued 1,843,675 shares of Series D-1 preferred stock at a price of \$17.12 per share for gross cash proceeds of approximately \$31,564,000 and issued 58,412 shares of Series D-1 preferred stock at \$17.12 per share in exchange for \$1,000,000 of future services to be provided by ICM. As of December 31, 2010, we had \$294,000 remaining on our prepaid credit with ICM. In addition, we have \$119,000 of restricted cash in certificates of deposit. Based on our current level of operations and anticipated growth, we believe that the net proceeds from our initial public offering and our existing cash and cash equivalents will provide adequate funds for ongoing operations, planned capital expenditures and working capital requirements for at least the next 12 months. Possible future joint ventures or acquisitions involving ethanol plant assets for retrofit to isobutanol production may be subject to our raising additional capital through future equity or debt issuances, including use of all or a portion of the net proceeds from our initial public offering. Successful completion of our research and development program and the attainment of profitable operations are dependent upon future events, including completion of our development activities resulting in sales of isobutanol or isobutanol derived products and/or technology, achieving market acceptance and demand for our products and services and attracting and retaining qualified personnel.

The following table sets forth the major sources and uses of cash for each of the periods set forth below:

	Year ended December 31, 2008	Year ended December 31, 2009	Year ended December 31, 2010
Net cash used in operating activities	\$ (11,741,000)	\$ (16,099,000)	\$ (20,896,000)
Net cash used in investing activities	\$ (2,315,000)	\$ (2,942,000)	\$ (25,702,000)
Net cash provided by financing activities	\$ 23,628,000	\$ 30,646,000	\$ 40,632,000

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### ***Operating Activities***

Our primary uses for cash from operating activities are personnel-related expenses and research and development-related expenses including costs incurred under development agreements, for licensing of technology and for the operation of our pilot and demonstration production facilities.

Cash used in operating activities of \$20,896,000 in 2010 reflected our net loss of \$40,112,000 partially offset by non-cash charges totaling \$16,233,000 and changes in operating assets and liabilities of \$2,983,000. Non-cash charges included depreciation and amortization of \$3,188,000, stock-based compensation of \$10,511,000, loss from change in fair value of warrant liabilities of \$2,333,000 and non-cash interest expense and amortization of debt discounts of \$762,000, which were offset by a gain in derivative assets of \$561,000. The net source of cash from our operating assets and liabilities of \$2,983,000 primarily reflected accrued milestone payments under our Cargill license agreement that are payable in 2011 and 2012, an increase in the corn payable account at Agri-Energy and amounts accrued for deferred offering costs and work performed by ICM.

Cash used in operating activities of \$16,099,000 in 2009 reflected our net loss of \$19,885,000 partially offset by non-cash charges totaling \$3,203,000 and changes in operating assets and liabilities of \$583,000. Non-cash charges included depreciation and amortization of \$1,511,000, stock-based compensation of \$945,000, loss from change in fair value of warrant liabilities of \$490,000 and non-cash interest expense and amortization of debt discounts of \$235,000. The net source of cash from our operating assets and liabilities of \$583,000 primarily reflected accrued milestone payments under our Cargill license agreement that were payable in 2010.

Cash used in operating activities of \$11,741,000 in 2008 reflected our net loss of \$14,542,000 partially offset by non-cash charges totaling \$2,065,000 and changes in operating assets and liabilities of \$736,000. Non-cash charges included depreciation of \$678,000, stock-based compensation of \$207,000, non-cash interest expense and amortization of debt discounts of \$1,102,000 and loss on abandonment or disposal of fixed assets of \$78,000. The net source of cash from our operating assets and liabilities of \$736,000 primarily reflected elimination of prepaid rent and recovery of deposits related to our former California offices following the relocation of our principal offices to Colorado and other changes in the ordinary course of our business.

### ***Investing Activities***

Our investing activities consist primarily of capital expenditures.

In 2010, cash used in investing activities included \$806,000 for capital expenditures and \$24,936,000 related to the purchase and acquisition of Agri-Energy (aggregate cash purchase price of \$25,521,000 less cash acquired of \$585,000).

In 2009, cash used in investing activities was primarily related to \$2,982,000 of capital expenditures, including \$2,586,000 for construction of our demonstration facility in St. Joseph, Missouri.

In 2008, cash used in investing activities was primarily related to \$2,360,000 of capital expenditures, including costs to build out our facility in Englewood, Colorado, including \$710,000 for construction of our pilot plant, and \$1,154,000 for laboratory related equipment used in our development programs.

### ***Financing Activities***

In 2010, cash provided by financing activities was \$40,632,000, primarily due to the net proceeds of \$31,411,000 from our sale of Series D-1 preferred stock, gross debt borrowings from TriplePoint of \$17,500,000, proceeds from the exercise of a preferred stock warrant of \$592,000 less repayment of \$5,000,000 of principal and \$250,000 of final payment under our debt agreement with Lighthouse, payment of deferred offering costs relating to our initial public offering of \$2,604,000 and payment of debt issue costs relating to our TriplePoint debt of \$1,033,000.

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In 2009, cash provided by financing activities was \$30,646,000, primarily due to net proceeds of \$31,154,000 from our sale of Series D preferred stock. In addition, we repaid a net amount of \$508,000 under our secured long-term debt arrangement with Lighthouse.

In 2008, cash provided by financing activities was \$23,628,000, primarily due to net proceeds of \$13,747,000 from our sale of Series C preferred stock. Additionally, during 2008 we raised \$3,000,000 from the sale of convertible promissory notes and warrants and borrowed a net amount of \$6,875,000 under our long-term debt arrangement with Lighthouse.

### ***Agri-Energy Acquisition***

In September 2010, we acquired a 22 MGPY ethanol production facility in Luverne, Minnesota that we intend to retrofit to produce isobutanol. We paid a purchase price of approximately \$20.6 million. In addition, we acquired and paid \$4.9 million for working capital. We paid the aggregate purchase price with available cash reserves and by borrowing \$12.5 million under our loan and security agreement with TriplePoint (as described below). We have begun the project engineering and permitting portion of the Agri-Energy facility retrofit process. Based on an initial evaluation of the Agri-Energy facility by ICM, we project capital costs of approximately \$17 million to retrofit this plant to produce 18 MGPY of isobutanol. We expect to incur additional costs of approximately \$5 million related to, among other things, the construction of equipment and storage tanks designed to allow switching between isobutanol and ethanol production and conservative engineering estimates made in acknowledgment that the Agri-Energy facility will be our first commercial retrofit, bringing the total projected cost to approximately \$22 million. While we believe we will have the ability to reverse the retrofit and switch between ethanol and isobutanol production, there is no guarantee that this will be the case and it is not our intent to do so.

We will require additional funding to achieve our goal of producing and selling over 350 million gallons of isobutanol in 2015.

### ***Gevo Development, LLC and CDP Gevo, LLC***

In September 2010, Gevo, Inc. acquired 100% of the class B interests in Gevo Development, which comprise 10% of the outstanding equity interests of Gevo Development, from CDP pursuant to an equity purchase agreement. Gevo, Inc. currently owns 100% of the outstanding equity interests of Gevo Development as a wholly owned subsidiary. In exchange for the class B interests, CDP will receive aggregate consideration of up to approximately \$1,143,000, (i) \$500,000 of which was paid on September 22, 2010, (ii) \$274,000 of which was paid on December 30, 2010, and (iii) the remainder of which is payable in five equal quarterly installments beginning in January 2011, subject to the terms and conditions set forth in the agreement. As of September 22, 2010, each of the owners of CDP is employed by Gevo, Inc. as an Executive Vice President, Upstream Business Development and as a co-managing director of Gevo Development.

### ***Cargill, Incorporated***

During February 2009, we entered into a license agreement with Cargill to obtain certain biological materials and license patent rights to use a yeast biocatalyst owned by Cargill. Under the agreement, Cargill has granted us an exclusive, royalty-bearing license, with limited rights to sublicense, to use the patent rights in a certain field, as defined in the agreement. The agreement contains five milestone payments totaling approximately \$4,300,000 that are payable after each milestone is completed.

During 2009, two milestones were completed and we recorded the related milestone amounts, along with an up-front signing fee, totaling \$875,000 to research and development expense. During March 2010, we completed milestone number three and recorded the related milestone amount of \$2,000,000 to research and development expense at its present value amount of \$1,578,000 because the milestone payment will be paid over a period greater than twelve months from the date it was incurred. At December 31, 2010, the present value of the

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liability, \$1,737,000, was recorded as \$924,000 in accounts payable and accrued expenses and \$813,000 in non-current liabilities. Milestones number four and five representing potential payments of up to \$1,500,000 have not been met as of December 31, 2010. Upon commercialization of a product which uses the Cargill biological material or is otherwise covered by the patent rights under this agreement, a royalty based on net sales is payable by us, subject to a minimum royalty amount per year, as defined in the agreement, and up to a maximum amount per year. We may terminate this agreement at any time upon 90 days' written notice. Unless terminated earlier, the agreement remains in effect until no licensed patent rights remain, but in no case before December 31, 2025. The accretion of the liability from March 2010 to December 31, 2010 of \$159,000 was recorded to interest expense.

During January 2010, we entered into a subcontractor agreement with Cargill to engage Cargill to provide research and development services to develop biological material that has been licensed by the company. The agreement may require payment of up to \$1,500,000 through the term which ends August 31, 2011. The agreement can be canceled thereafter by either party upon 30 days' written notice.

### ***Secured Long-Term Debt***

On December 18, 2006, we entered into a loan and security agreement with Lighthouse. Through June 30, 2009, we had borrowed \$9,078,000 and repaid principal of \$1,143,000, resulting in an outstanding principal balance of \$7,935,000. In July 2009, we amended the Lighthouse agreement to aggregate all outstanding loan advances totaling \$7,935,000 into one promissory note that bears an interest rate of 12% per annum, required interest only payments for the period from July 2009 through December 2010, and requires principal plus interest repayments of equal amounts over the 18 months commencing January 1, 2011 and a final payment of \$454,000 due on July 1, 2012. Under the terms of the amendment, we are prohibited from granting a security interest in our intellectual property assets to any other entity until Lighthouse is paid in full, and Lighthouse was entitled to maintain a blanket security interest in all of our assets, other than our intellectual property, until such time as we paid \$5,000,000 in principal payments against the note. On August 6, 2010, we repaid \$5,000,000 in outstanding principal under the note, using amounts borrowed pursuant to a loan and security agreement with TriplePoint. As a result of such payment, Lighthouse has released its blanket security interest, and retains only our negative pledge on our intellectual property and a security interest in the assets, including equipment and fixtures, financed by the proceeds of each original loan advance made under the loan agreement until such time as the loan is paid in full. The Lighthouse agreement does not contain financial ratio covenants, but does impose certain affirmative and negative covenants, which include prohibiting us from paying any dividends or distributions or creating any liens against the collateral as defined in the agreement, as amended. We cannot borrow any further amounts under our agreement with Lighthouse and we are in compliance with all debt covenants.

In August 2010, concurrently with the execution of the acquisition agreement with Agri-Energy, Gevo, Inc. entered into a loan and security agreement with TriplePoint, pursuant to which it borrowed \$5,000,000. The loan and security agreement includes customary affirmative and negative covenants for agreements of this type and events of default. The aggregate amount outstanding under the loan and security agreement bears interest at a rate equal to 13%, is subject to an end-of-term payment equal to 8% of the amount borrowed and is secured by substantially all of the assets of Gevo, Inc., other than its intellectual property. This loan is also secured by substantially all of the assets of Agri-Energy, LLC. Additionally, under the terms of each of (i) the loan and security agreement and (ii) Gevo, Inc.'s guarantee of Gevo Development's and Agri-Energy's obligations under the loan and security agreement described below, Gevo, Inc. is prohibited from granting a security interest in its intellectual property assets to any other entity until both TriplePoint loans are paid in full. The loan matures on August 31, 2014, and provides for interest only payments during the first 24 months. An additional interest-only period may be elected now that Gevo, Inc. has completed an initial public offering and a subsequent interest-only period will become available in the event that Gevo, Inc. is producing isobutanol at its Agri-Energy facility by June 30, 2012. Each such additional interest-only period may be for a maximum of 6 months, for a total possible interest-only extension period of 12 months. Gevo, Inc. used the funds from this loan to repay a portion of its existing indebtedness with Lighthouse.



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In August 2010, Gevo Development also entered into a loan and security agreement with TriplePoint under which, upon the satisfaction of certain conditions, Gevo Development could borrow up to \$12.5 million to finance the transactions contemplated by the acquisition agreement with Agri-Energy. In September 2010, Gevo Development borrowed the \$12.5 million and closed the transactions contemplated by the acquisition agreement, at which time the loan and security agreement was amended and Agri-Energy, LLC became a borrower under the loan and security agreement. The loan and security agreement includes customary affirmative and negative covenants for agreements of this type and events of default. The aggregate amount outstanding under the loan and security agreement bears interest at a rate equal to 13% and is subject to an end-of-term payment equal to 8% of the amount borrowed. The loan is secured by the equity interests of Agri-Energy, LLC held by Gevo Development and substantially all the assets of Agri-Energy, LLC. The loan matures on September 1, 2014, and provides for interest only payments during the first 24 months. An additional interest-only period may be elected now that Gevo, Inc. has completed an initial public offering and a subsequent interest-only period will become available in the event that Gevo, Inc. is producing isobutanol at its Agri-Energy facility by June 30, 2012. Each such additional interest-only period may be for a maximum of 6 months, for a total possible interest-only extension period of 12 months. The loan is guaranteed by Gevo, Inc. pursuant to a continuing guaranty executed by Gevo, Inc. in favor of TriplePoint, which is secured by substantially all of the assets of Gevo, Inc., other than its intellectual property.

**Contractual Obligations and Commitments**

The following summarizes the future commitments arising from our contractual obligations at December 31, 2010:

	<b>Total</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015 and Thereafter</b>
Secured long-term debt, including current portion (before debt discounts)(1)	\$ 22,038,000	\$ 1,897,000	\$ 3,371,000	\$ 8,478,000	\$ 8,292,000	\$
Cash interest payments on long-term debt(1)	6,742,000	2,536,000	2,312,000	1,523,000	371,000	
Operating leases(2)	1,288,000	499,000	497,000	292,000		
Payments to CDP for purchase of Class B interest(3)	369,000	295,000	74,000			
<b>Total</b>	<b>\$ 30,437,000</b>	<b>\$ 5,227,000</b>	<b>\$ 6,254,000</b>	<b>\$ 10,293,000</b>	<b>\$ 8,663,000</b>	<b>\$</b>

- (1) Includes principal and final payments on our long-term debt as of December 31, 2010. With respect to the TriplePoint loans, an additional interest-only period may be elected now that Gevo, Inc. has completed an initial public offering and a subsequent interest-only period will become available in the event that Gevo, Inc. is producing isobutanol at its Agri-Energy facility by June 30, 2012. Each such additional interest-only period may be for a maximum of 6 months, for a total possible interest-only extension period of 12 months. If one or both of these interest-only periods is elected, the amounts shown during the years ended December 31, 2012 through 2014 will be different.
- (2) Our commitments for operating leases primarily relate to our leased facility in Englewood, Colorado.
- (3) In September 2010, Gevo, Inc. purchased all of the outstanding class B interests in Gevo Development from CDP pursuant to an equity purchase agreement. In exchange for the class B interests, CDP will receive aggregate consideration of up to approximately \$1,143,000, (i) \$500,000 of which was paid on September 22, 2010, (ii) \$274,000 of which was paid on December 30, 2010, and (iii) the remainder of which is payable in five equal quarterly installments beginning in January 2011, subject to the terms and conditions set forth in the equity purchase agreement.

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The table above reflects only payment obligations that are fixed and determinable. The above amounts exclude potential payments to be made under our license and other agreements that are based on the achievement of future milestones or royalties on product sales.

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

We did not have during the periods presented, and we do not currently have, any relationships with unconsolidated entities, such as entities often referred to as structured finance or special purpose entities, established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

### **Recent Accounting Pronouncements**

Refer to Note 1 in the accompanying notes to our consolidated financial statements for a discussion of recent accounting pronouncements.

## **Item 7A. Quantitative and Qualitative Disclosures about Market Risk**

### ***Interest Rate Risk***

We had unrestricted cash and cash equivalents totaling \$21,240,000 and \$15,274,000 at December 31, 2009 and 2010, respectively. These amounts were invested primarily in demand deposit savings accounts and are held for working capital purposes. The primary objective of our investment activities is to preserve our capital for the purpose of funding our operations. We do not enter into investments for trading or speculative purposes. We believe we do not have material exposure to changes in fair value as a result of changes in interest rates. Declines in interest rates, however, will reduce future investment income. If overall interest rates fell by 10% in 2009 and 2010, our interest income would have declined by approximately \$13,000 and \$11,000, respectively, assuming consistent investment levels.

The terms of our Lighthouse and TriplePoint long-term debt facilities provide for a fixed rate of interest, and therefore are not subject to fluctuations in market interest rates.

### ***Commodity Price Risk***

We produce ethanol and distiller's grains from corn and our business is sensitive to changes in the price of corn. The price of corn is subject to fluctuations due to unpredictable factors such as weather, corn planted and harvested acreage, changes in national and global supply and demand and government programs and policies. We use natural gas in the ethanol production process and, as a result, our business is also sensitive to changes in the price of natural gas. The price of natural gas is influenced by such weather factors as extreme heat or cold in the summer and winter, or other natural events like hurricanes in the spring, summer and fall. Other natural gas price factors include North American exploration and production, and the amount of natural gas in underground storage during both the injection and withdrawal seasons. Ethanol prices are sensitive to world crude-oil supply and demand, crude-oil refining capacity and utilization, government regulation and consumer demand for alternative fuels. Distiller's grains prices are sensitive to various demand factors such as numbers of livestock on feed, prices for feed alternatives and supply factors, primarily production by ethanol plants and other sources. We attempt to reduce the market risk associated with fluctuations in the price of corn and natural gas by employing a variety of risk management and economic hedging strategies. Strategies include the use of forward purchase contracts and exchange-traded futures contracts.

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders of

Gevo, Inc. and Subsidiaries

Englewood, Colorado

We have audited the accompanying consolidated balance sheets of Gevo, Inc. and its subsidiaries (the "Company") (a development stage company) as of December 31, 2009 and 2010, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2010 and for the period from June 9, 2005 (date of inception) to December 31, 2010. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2009 and 2010, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2010 and for the period from June 9, 2005 (date of inception) to December 31, 2010, in conformity with accounting principles generally accepted in the United States of America.

The Company is a development stage enterprise engaged in conducting research and development, establishing its facilities, recruiting personnel, business development, business and financial planning, and raising capital. As discussed in Note 1 to the consolidated financial statements, successful completion of the Company's research and development program, and ultimately, the attainment of profitable operations are dependent upon future events, including completion of its development activities resulting in sales of isobutanol or isobutanol derived products and/or technology, obtaining adequate financing to complete its development activities, obtaining adequate financing to acquire access to and complete the retrofit of ethanol plants to isobutanol production, market acceptance and demand for its products and services and attracting and retaining qualified personnel.

As discussed in Note 11 to the consolidated financial statements, the Company has changed its method of accounting for preferred stock warrants as of January 1, 2009.

/s/ DELOITTE & TOUCHE LLP

Denver, Colorado

March 28, 2011

**Table of Contents****CONSOLIDATED BALANCE SHEETS**

AS OF DECEMBER 31, 2009 AND 2010

	December 31, 2009	December 31, 2010
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 21,240,000	\$ 15,274,000
Accounts receivable	99,000	2,830,000
Inventories		3,765,000
Prepaid expenses and other current assets	203,000	1,040,000
Derivative asset		361,000
Margin deposit		624,000
Total current assets	21,542,000	23,894,000
PROPERTY, PLANT AND EQUIPMENT Net	4,632,000	23,465,000
RESTRICTED CERTIFICATE OF DEPOSIT Less current portion	119,000	79,000
DEFERRED OFFERING COSTS		3,152,000
DEBT ISSUE COSTS		929,000
DEPOSITS AND OTHER ASSETS	90,000	90,000
<b>TOTAL</b>	<b>\$ 26,383,000</b>	<b>\$ 51,609,000</b>
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable and accrued expenses	\$ 2,521,000	\$ 7,903,000
Current portion of secured long-term debt Net of \$0 and \$113,000 discount at December 31, 2009 and 2010, respectively		1,785,000
Derivative liability		405,000
Fair value of warrant liabilities	982,000	2,034,000
Total current liabilities(*)	3,503,000	12,127,000
SECURED LONG-TERM DEBT Net of \$688,000 and \$1,493,000 discount, less current portion, at December 31, 2009 and 2010, respectively	7,701,000	18,647,000
OTHER LIABILITIES	96,000	876,000
<b>Total liabilities</b>	<b>11,300,000</b>	<b>31,650,000</b>
<b>COMMITMENTS AND CONTINGENCIES (Notes 17 and 20)</b>		
<b>STOCKHOLDERS EQUITY</b>		
Gevo, Inc. stockholders equity:		
Convertible preferred stock, \$0.01 par value per share; 13,922,337 and 15,246,000 shares authorized at December 31, 2009 and 2010, respectively; 12,603,439 and 14,613,602 shares issued and outstanding at December 31, 2009 and 2010, respectively; aggregate liquidation preference of \$57,504,000 and \$90,660,000 at December 31, 2009 and 2010, respectively	126,000	146,000
Common stock, \$0.01 par value per share; 25,000,000 and 30,000,000 shares authorized at December 31, 2009 and 2010, respectively; 1,151,376 and 1,160,657 shares issued and outstanding at December 31, 2009 and 2010, respectively	12,000	12,000
Additional paid-in capital	57,382,000	105,128,000
Deficit accumulated during development stage	(42,437,000)	(85,327,000)
<b>Total stockholders equity</b>	<b>15,083,000</b>	<b>19,959,000</b>

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TOTAL	\$ 26,383,000	\$ 51,609,000
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\* Liabilities of the Company's consolidated subsidiaries for which creditors do not have recourse to the general credit of Gevo, Inc. were \$0 and \$4,785,000 at December 31, 2009 and 2010, respectively, and are recorded within current liabilities.

**See notes to consolidated financial statements**

**Table of Contents****CONSOLIDATED STATEMENTS OF OPERATIONS**

FOR THE YEARS ENDED DECEMBER 31, 2008, 2009 AND 2010

	Year Ended December 31, 2008	Year Ended December 31, 2009	Year Ended December 31, 2010	From June 9, 2005 (Date of Inception) To December 31, 2010
<b>REVENUES:</b>				
Grant revenue	\$ 208,000	\$ 660,000	\$ 1,493,000	\$ 2,736,000
Licensing revenue			138,000	138,000
Ethanol sales and related products			14,765,000	14,765,000
<b>Total revenues</b>	<b>208,000</b>	<b>660,000</b>	<b>16,396,000</b>	<b>17,639,000</b>
<b>COST OF GOODS SOLD</b>			<b>(13,446,000)</b>	<b>(13,446,000)</b>
<b>GROSS MARGIN</b>	<b>208,000</b>	<b>660,000</b>	<b>2,950,000</b>	<b>4,193,000</b>
<b>OPERATING EXPENSES:</b>				
Research and development	(7,376,000)	(10,508,000)	(14,820,000)	(37,466,000)
Selling, general and administrative	(6,065,000)	(8,699,000)	(23,643,000)	(41,435,000)
Lease termination costs				(894,000)
Loss on abandonment or disposal of assets	(78,000)	(22,000)		(343,000)
<b>Total operating expenses</b>	<b>(13,519,000)</b>	<b>(19,229,000)</b>	<b>(38,463,000)</b>	<b>(80,138,000)</b>
<b>LOSS FROM OPERATIONS</b>	<b>(13,311,000)</b>	<b>(18,569,000)</b>	<b>(35,513,000)</b>	<b>(75,945,000)</b>
<b>OTHER (EXPENSE) INCOME:</b>				
Interest expense	(1,385,000)	(1,103,000)	(2,374,000)	(5,002,000)
Interest and other income	154,000	277,000	108,000	636,000
Loss from change in fair value of warrant liabilities		(490,000)	(2,333,000)	(2,823,000)
<b>Other expense net</b>	<b>(1,231,000)</b>	<b>(1,316,000)</b>	<b>(4,599,000)</b>	<b>(7,189,000)</b>
<b>NET LOSS</b>	<b>(14,542,000)</b>	<b>(19,885,000)</b>	<b>(40,112,000)</b>	<b>(83,134,000)</b>
Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock			(2,778,000)	(2,778,000)
<b>NET LOSS ATTRIBUTABLE TO GEVO, INC. COMMON STOCKHOLDERS</b>	<b>\$ (14,542,000)</b>	<b>\$ (19,885,000)</b>	<b>\$ (42,890,000)</b>	<b>\$ (85,912,000)</b>
Net loss per share attributable to Gevo, Inc. common stockholders basic and diluted	\$ (13.83)	\$ (18.07)	\$ (37.44)	
Weighted-average number of common shares outstanding basic and diluted	1,051,848	1,100,294	1,145,500	

See notes to consolidated financial statements





**Table of Contents****CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**

	Convertible Preferred Stock		Common Stock		Additional	Deficit	Total
	Shares	Amount	Shares	Amount	Paid-In Capital	Accumulated During the Development Stage	Stockholders' Equity
BALANCE June 9, 2005 (date of inception)		\$		\$	\$	\$	\$
Issuance of common stock			950,000	10,000	(10,000)		
Issuance of Series A-1 preferred stock	1,000,000	10,000			490,000		500,000
Stock issuance costs					(56,000)		(56,000)
Net loss for the year ended December 31, 2005						(259,000)	(259,000)
BALANCE December 31, 2005	1,000,000	10,000	950,000	10,000	424,000	(259,000)	185,000
Issuance of Series A-2 preferred stock	1,084,000	11,000			892,000		903,000
Issuance of Series A-3 preferred stock	915,000	9,000			1,592,000		1,601,000
Issuance of warrants with secured long-term debt					10,000		10,000
Stock issuance costs					(20,000)		(20,000)
Stock-based compensation					2,000		2,000
Net loss for the year ended December 31, 2006						(1,110,000)	(1,110,000)
BALANCE December 31, 2006	2,999,000	30,000	950,000	10,000	2,900,000	(1,369,000)	1,571,000
Issuance of Series A-4 preferred stock	858,369	9,000			1,991,000		2,000,000
Issuance of Series B preferred stock	1,027,397	10,000			2,990,000		3,000,000
Issuance of common stock			22,000		10,000		10,000
Issuance of restricted common stock			187,500	2,000	(2,000)		
Issuance of warrants with secured long-term debt					33,000		33,000
Stock issuance costs					(82,000)		(82,000)
Stock-based compensation					55,000		55,000
Net loss for the year ended December 31, 2007						(7,226,000)	(7,226,000)
BALANCE December 31, 2007	4,884,766	49,000	1,159,500	12,000	7,895,000	(8,595,000)	(639,000)
Issuance of Series C preferred stock converted from promissory notes and accrued interest	555,346	6,000			3,037,000		3,043,000
Issuance of Series C preferred stock	2,546,844	25,000			13,932,000		13,957,000
Issuance of warrants with secured long-term debt					326,000		326,000
Issuance of warrants with convertible promissory notes					505,000		505,000
Beneficial conversion feature convertible promissory					505,000		505,000

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notes				
Stock issuance costs			(210,000)	(210,000)
Stock-based compensation			207,000	207,000
Issuance of restricted common stock	50,000	1,000	(1,000)	
Forfeiture of restricted common stock	(64,583)	(1,000)	1,000	
Exercise of stock options to common stock	19,155		6,000	6,000
Net loss for the year ended December 31, 2008			(14,542,000)	(14,542,000)

**Table of Contents****CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (Continued)**

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Deficit Accumulated During the Development Stage	Total Stockholders' Equity
	Shares	Amount	Shares	Amount			
BALANCE December 31, 2008	7,986,956	80,000	1,164,072	12,000	26,203,000	(23,137,000)	3,158,000
Cumulative effect of reclassification of preferred stock warrants from equity to liabilities on January 1, 2009					(874,000)	585,000	(289,000)
Issuance of Series D preferred stock	4,616,483	46,000			32,454,000		32,500,000
Stock issuance costs					(1,346,000)		(1,346,000)
Stock-based compensation					945,000		945,000
Forfeiture of restricted common stock			(13,530)				
Exercise of stock options to common stock			834				
Net loss for the year ended December 31, 2009						(19,885,000)	(19,885,000)
BALANCE December 31, 2009	12,603,439	126,000	1,151,376	12,000	57,382,000	(42,437,000)	15,083,000
Issuance of Series D-1 preferred stock	1,902,087	19,000			26,801,000		26,820,000
Beneficial conversion feature Series D-1					5,744,000		5,744,000
Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock					2,778,000	(2,778,000)	
Stock issuance costs					(153,000)		(153,000)
Stock-based compensation					10,511,000		10,511,000
Forfeiture of restricted common stock			(22,266)				
Exercise of stock options to common stock			31,547		16,000		16,000
Issuance of Series C preferred stock upon exercise of warrant	108,076	1,000			2,049,000		2,050,000
Net loss for the year ended December 31, 2010						(40,112,000)	(40,112,000)
BALANCE December 31, 2010	14,613,602	\$ 146,000	1,160,657	\$ 12,000	\$ 105,128,000	\$ (85,327,000)	\$ 19,959,000

See notes to consolidated financial statements

**Table of Contents****CONSOLIDATED STATEMENTS OF CASH FLOWS**

FOR THE YEARS ENDED DECEMBER 31, 2008, 2009 AND 2010

	Year Ended December 31, 2008	Year Ended December 31, 2009	Year Ended December 31, 2010	Cumulative Amounts From June 9, 2005 (Date of Inception) To December 31, 2010
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>				
Net loss	\$ (14,542,000)	\$ (19,885,000)	\$ (40,112,000)	\$ (83,134,000)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	678,000	1,511,000	3,188,000	5,692,000
Stock-based compensation	207,000	945,000	10,511,000	11,720,000
Stock expense for shares issued pursuant to license agreements				10,000
Noncash interest expense and amortization of debt discounts and debt issue costs to noncash interest expense	1,102,000	235,000	762,000	2,153,000
Loss from change in fair value of warrant liabilities		490,000	2,333,000	2,823,000
Gain from change in derivative			(561,000)	(561,000)
Loss on abandonment or disposal of fixed assets	78,000	22,000		343,000
Changes in operating assets and liabilities (net of effects of acquisition):				
Accounts receivable	33,000	(99,000)	(732,000)	(831,000)
Prepaid expenses and other current assets	247,000	(128,000)	47,000	(117,000)
Inventories			(195,000)	(195,000)
Margin deposit			268,000	268,000
Deposits and other assets	147,000	4,000	1,000	(88,000)
Accounts payable, accrued expenses, and long-term liabilities	309,000	806,000	3,594,000	6,160,000
Net cash used in operating activities	(11,741,000)	(16,099,000)	(20,896,000)	(55,757,000)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>				
Acquisitions of property, plant and equipment	(2,360,000)	(2,982,000)	(806,000)	(8,240,000)
Acquisition of Agri-Energy, net of cash acquired			(24,936,000)	(24,936,000)
Proceeds from the sale of property and equipment	5,000			5,000
Restricted certificate of deposit	40,000	40,000	40,000	(119,000)
Net cash used in investing activities	(2,315,000)	(2,942,000)	(25,702,000)	(33,290,000)

**Table of Contents****CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)**

	Year Ended December 31, 2008	Year Ended December 31, 2009	Year Ended December 31, 2010	Cumulative Amounts From June 9, 2005 (Date of Inception) To December 31, 2010
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>				
Proceeds from issuance of common stock	6,000		16,000	22,000
Proceeds from issuance of convertible preferred stock	13,957,000	32,500,000	31,564,000	86,025,000
Proceeds from issuance of convertible promissory notes with warrant	3,000,000			3,000,000
Proceeds from issuance of secured long-term debt	7,396,000	114,000	17,500,000	26,578,000
Proceeds from issuance of warrants				1,000
Proceeds from exercise of warrants			592,000	592,000
Payment of principal and final payment on secured long-term debt	(521,000)	(622,000)	(5,250,000)	(6,393,000)
Deferred offering costs			(2,604,000)	(2,604,000)
Debt issue costs			(1,033,000)	(1,033,000)
Payment of stock issuance costs	(210,000)	(1,346,000)	(153,000)	(1,867,000)
Net cash provided by financing activities	23,628,000	30,646,000	40,632,000	104,321,000
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>				
	9,572,000	11,605,000	(5,966,000)	15,274,000
<b>CASH AND CASH EQUIVALENTS:</b>				
Beginning of period	63,000	9,635,000	21,240,000	
Ending of period	\$ 9,635,000	\$ 21,240,000	\$ 15,274,000	\$ 15,274,000
<b>SUPPLEMENTAL DISCLOSURES OF NONCASH TRANSACTIONS Investing and financing:</b>				
Warrants issued with secured long-term debt	\$ 326,000	\$ 203,000	\$ 177,000	\$ 749,000
Warrants issued with convertible promissory notes	\$ 505,000	\$	\$	\$ 505,000
Promissory notes and accrued interest converted to Series C preferred stock	\$ 3,043,000	\$	\$	\$ 3,043,000
Issuance of common stock pursuant to license agreements	\$	\$	\$	\$ 10,000
Issuance of Series C preferred stock upon exercise of warrant (amount reclassified from liability to equity)	\$	\$	\$ 1,458,000	\$ 1,458,000
Issuance of Series D-1 preferred stock to ICM, Inc. in exchange for a credit against future services	\$	\$	\$ 1,000,000	\$ 1,000,000

**Table of Contents****CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)**

	Year Ended December 31, 2008	Year Ended December 31, 2009	Year Ended December 31, 2010	Cumulative Amounts From June 9, 2005 (Date of Inception) To December 31, 2010
Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock	\$	\$	\$ 2,778,000	\$ 2,778,000
Capital asset additions in accounts payable and accrued expenses	\$	\$ 52,000	\$ 174,000	\$ 174,000
Capital asset additions acquired using prepaid credit with ICM, Inc.	\$	\$	\$ 438,000	\$ 438,000
Accrued deferred offering costs	\$	\$	\$ 548,000	\$ 548,000
SUPPLEMENTAL CASH FLOW DISCLOSURE Cash paid for interest	\$ 283,000	\$ 868,000	\$ 1,453,000	\$ 2,690,000

See notes to consolidated financial statements

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### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

(As of December 31, 2009 and 2010 and for the years ended December 31, 2008, 2009 and 2010.)

#### **1. Nature of Business and Significant Accounting Policies**

**Nature of Business** Gevo, Inc. (together with its subsidiaries, the Company) is a renewable chemicals and advanced biofuels company focused on the development and commercialization of alternatives to petroleum-based products based on isobutanol produced from renewable feedstocks. Gevo, Inc. was incorporated in Delaware on June 9, 2005. Gevo, Inc. formed Gevo Development, LLC ( Gevo Development ) on September 18, 2009 to finance and develop biorefineries through joint venture or direct acquisition (Note 6). Gevo Development became a wholly owned subsidiary of Gevo, Inc. on September 22, 2010. Gevo Development purchased all of the membership interests of Agri-Energy, LLC and certain assets of Agri-Energy Limited Partnership (collectively referred to as Agri-Energy ), on September 22, 2010 (Note 2). Agri-Energy, a wholly owned subsidiary of Gevo Development, is currently engaged in the business of producing and selling ethanol and related products produced at its ethanol plant located in Luverne, Minnesota.

On February 14, 2011, the Company completed its initial public offering issuing 8,222,500 shares of common stock at an offering price of \$15.00 per share, resulting in net proceeds to the Company of approximately \$114.7 million, after deducting underwriting discounts and commissions of \$8.6 million. Additionally, the Company incurred estimated offering costs of \$4.3 million related to the initial public offering. Upon the closing of the initial public offering, the Company's outstanding shares of convertible preferred stock were automatically converted into 16,329,703 shares of common stock and the outstanding convertible preferred stock warrants were automatically converted into common stock warrants to purchase a total of 398,032 shares of common stock.

At December 31, 2010, the Company was considered to be in the development stage as its primary activities, since incorporation, were conducting research and development, establishing its facilities, recruiting personnel, business development, business and financial planning and raising capital. Successful completion of the Company's research and development program, and ultimately, the attainment of profitable operations are dependent upon future events, including completion of its development activities resulting in sales of isobutanol or isobutanol derived products and/or technology, obtaining adequate financing to complete its development activities, obtaining adequate financing to acquire access to and complete the retrofit of ethanol plants to isobutanol production, market acceptance and demand for its products and services, and attracting and retaining qualified personnel.

Following the Company's acquisition of Agri-Energy on September 22, 2010, the Company records revenue from the sale of ethanol and related products. Since the production of ethanol is not the Company's intended business, the Company will continue to report as a development stage company until it begins to generate revenue from the sale of isobutanol or other products that are or become the Company's intended business.

**Financial Condition** The Company's consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. For the year ended December 31, 2010, the Company incurred a consolidated net loss of \$40,112,000 and had an accumulated deficit of \$85,327,000. The Company expects to incur future net losses as it continues to fund the development and commercialization of its product candidates.

The Company, prior to its initial public offering, has funded its activities since inception primarily through private placements of convertible preferred stock and the issuance of convertible and nonconvertible debt. The Company expects to obtain funding through additional equity offerings and issuance of debt until it achieves positive cash flow from operations. The Company's cash and cash equivalents at December 31, 2010 totaled \$15,274,000. On February 14, 2011, the Company completed its initial public offering issuing 8,222,500 shares of common stock at an offering price of \$15.00 per share, resulting in net proceeds, after deducting underwriting discounts and commissions but before expenses, to the Company of approximately \$114.7 million. Management expects that the net proceeds from its initial public offering and cash on hand will provide the Company with adequate funding for at least the next 12 months. There are no assurances that the Company will be able to raise

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adequate funds, or achieve or sustain profitability or positive cash flow from operations. The accompanying consolidated financial statements do not include any adjustments that may result from the Company's inability to raise sufficient funds or achieve profitability.

A summary of the Company's significant accounting policies is as follows:

*Principles of Consolidation* The consolidated financial statements include the accounts of Gevo, Inc., Gevo Development and Agri-Energy. All intercompany balances and transactions have been eliminated in consolidation.

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

*Risks and Uncertainties* The Company's operations are subject to certain risks and uncertainties, including those associated with the ability to meet obligations, continuing losses, negative cash flow from operations, fluctuations in operating results, fluctuations in prices of corn, distiller's grains, natural gas liquids and ethanol, funding expansion, strategic alliances, managing growth and expansion, acquiring access to or ownership of production assets, financing arrangement terms that may restrict operations, government regulations and regulatory requirements, development by the Company's competitors of new technological innovations, protection of proprietary technology, the economy, technology trends, completion of its development activities resulting in commercial products and/or technology, and evolving industry standards.

*Cash and Cash Equivalents* The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. The Company maintains its cash in bank deposits that at times exceed federally insured limits.

*Deferred Offering Costs* Deferred offering costs include costs directly attributable to the Company's offering of its equity securities. These costs are deferred and capitalized and will be charged against the proceeds of the offering once completed. If the offering is not successful, the deferred offering costs will be recorded as an expense in the statement of operations in the period that determination is made.

*Debt Issue Costs and Debt Discount* Debt issue costs are costs incurred in connection with the Company obtaining financing that have been capitalized and are being amortized over the expected maturity period of the related debt, using the effective interest method. Debt discounts incurred with the issuance of long-term debt are amortized to interest expense over the terms of the debt using the effective interest method. These discounts are recorded on the consolidated balance sheets as a reduction to secured long-term debt.

*Accounts Receivable* The Company records receivables for products shipped but for which payment has not yet been received. As of December 31, 2010, no allowance for doubtful accounts has been recorded, based upon the expected full collection of the accounts receivable. Substantially all ethanol sold through the Company's Agri-Energy subsidiary from the date of the acquisition through December 31, 2010 was sold to C&N Ethanol Marketing (C&N). Accounts receivables from C&N made up 56% of the Company's total accounts receivable balance at December 31, 2010.

*Inventories* Corn, ethanol, distiller's grains, enzymes and other inventory items are stated at the lower of cost or market value. Cost is determined by the first-in, first-out method. Ethanol inventory cost consists of the applicable share of raw material, direct labor and manufacturing overhead costs.

*Revenue Recognition* Following consummation of the Agri-Energy acquisition, the Company records revenue from the sale of ethanol and related products. The Company recognizes revenue 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 the Company and its customers.



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In accordance with the Company's agreements for the marketing and sale of ethanol and related products, commissions due to marketers are deducted from the gross sales price at the time payment is remitted to the Company. Ethanol and related products sales are recorded net of commissions.

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

*Cost of Goods Sold* Cost of goods sold includes costs for materials, direct labor and certain plant overhead costs. Direct materials consist of the costs of corn feedstock, denaturant and process chemicals. Direct labor includes compensation of non-management personnel involved in the operation of the ethanol plant. Plant overhead costs primarily consist of plant utilities and plant depreciation. Cost of goods sold is mainly affected by the cost of corn and natural gas. Corn is the most significant raw material cost. The Company purchases natural gas to power steam generation in the ethanol production process and to dry the distiller's grains. Cost of goods sold also includes net gains or losses from derivatives relating to corn and natural gas.

*Investment in Commodities Contracts, Derivative Instruments and Hedging Activities* The Company enters into forward purchase contracts for corn and natural gas as a means of securing corn and natural gas used in ethanol production. The Company also enters into exchange-traded futures contracts for corn as a means of managing exposure to changes in corn prices. These transactions are considered to be derivatives and are recorded on the balance sheet as assets and liabilities based on the derivative's fair value. Changes in the fair value of the derivative contracts are recognized currently in income unless specific hedge accounting criteria are met. The Company has not designated any of its derivatives as hedges for financial reporting purposes.

*Property, Plant and Equipment* Property, plant and equipment are recorded at cost less accumulated depreciation. Provisions for depreciation and amortization are computed using the straight-line method over the assets' estimated useful lives, except for the Company's demonstration plant equipment and capitalized costs, which are depreciated over the remaining contractual term of the development agreement, as amended, with ICM, Inc. ( "ICM" ) which ends December 31, 2011 (Note 5). Leasehold improvements are amortized over the term of the lease agreement or the service lives of the improvements, whichever is shorter. Assets under construction are depreciated when they are placed into service. Maintenance and repairs are charged to expense as incurred and expenditures for major improvements are capitalized. When assets are retired or otherwise disposed of, the property accounts are relieved of costs and accumulated depreciation and any resulting gain or loss is credited or charged to operations. Periodically, the plant or a portion of the plant's equipment will be shut down to perform certain maintenance projects that are expected to improve the operating efficiency of the plant. These costs are expensed or capitalized based upon the nature of the costs.

*Impairment of Long-Lived Assets* The Company periodically evaluates the recoverability of its long-lived assets in accordance with FASB ASC 360, *Property, Plant, and Equipment*, and, if appropriate, reduces the carrying value whenever events or changes in business conditions indicate the carrying amount of the assets may not be fully recoverable. Recognition of impairment of long-lived assets is made in the event the carrying value of such assets exceeds the fair value. The carrying amount may not be recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the assets. The Company considered various factors when determining if these assets should be evaluated for impairment. The Company has not yet generated positive cash flows from operations, and such cash flows may not materialize for a significant period in the future, if ever. Additionally, the Company may make changes to its business plan that will result in changes to the expected cash flows from long-lived assets. As a result, it is possible that future evaluations of long-lived assets may result in impairment. No impairment charges have been recorded during the period from June 9, 2005 (date of inception) to December 31, 2010.

*Patents* All costs related to filing and pursuing patent applications are expensed as incurred as recoverability of such expenditures is uncertain and the underlying technologies are under development. Patent-related legal expenses incurred and recorded as selling, general and administrative expense during the years ended December 31, 2008, 2009 and 2010, and for the period from June 9, 2005 (date of inception) to December 31, 2010, were \$598,000, \$743,000, \$993,000, and \$2,964,000, respectively.

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**Beneficial Conversion Feature** The Company has recorded a beneficial conversion feature relating to the issuance of Series D-1 preferred stock (Note 10). The beneficial conversion feature is recorded as a discount to the Series D-1 preferred stock and amortized to retained earnings through September 30, 2011, unless converted earlier (Note 10). On February 14, 2011, upon completion of the Company's initial public offering, the shares of Series D-1 preferred stock automatically converted to common stock at a rate of 1.9022 shares of common stock for each share of Series D-1 preferred stock.

**Research and Development** Research and development costs are expensed as incurred and are recorded as research and development expense in the consolidated statements of operations. The Company's research and development costs consist of expenses incurred to identify, develop, and test its technologies for the production of isobutanol and the development of downstream applications thereof. Research and development expense includes personnel costs, consultants and related contract research, facility costs, supplies, depreciation on property, plant and equipment used in development, license fees and milestone payments paid to third parties for use of their intellectual property and patent rights, and other direct and allocated expenses incurred to support the Company's overall research and development programs.

**Income Taxes** The Company accounts for income taxes under FASB ASC 740, *Income Taxes*. Deferred tax assets and liabilities are recorded for the estimated future tax effects of temporary differences between the tax basis of assets and liabilities and amounts reported in the accompanying balance sheets, as well as operating loss carryforwards. Deferred tax assets are reduced by a valuation allowance if current evidence indicates that it is considered more likely than not that these benefits will not be realized (Note 14). Effective January 1, 2007, the Company adopted the accounting guidance for uncertainties in income taxes and determined that the Company had no material unrecognized tax benefits that would affect its effective tax rate if recognized. At December 31, 2010, the Company has no material unrecognized tax benefits. The Company classifies interest and penalties arising from the underpayment of income taxes in the consolidated statements of operations as income tax expense. As of December 31, 2009 and 2010, the Company has no accrued interest or penalties related to uncertain tax positions.

**Stock-Based Compensation** The Company accounts for stock-based compensation for awards to employees in accordance with FASB ASC 718, *Compensation-Stock Compensation*. Under the provision of FASB ASC 718, stock-based compensation for awards to employees is measured at the grant date based on the fair value of the awards and is recognized as expense over the required service period of the award. The Company estimates the fair value of stock options issued to employees using the Black-Scholes option-pricing model.

The Company accounts for stock-based awards to nonemployees using a fair value method in accordance with FASB ASC 718 and FASB ASC 505-50, *Equity-Equity-Based Payments to Non-Employees*. The Company determines the estimated fair value of stock options issued to nonemployees using the Black-Scholes option-pricing model. Restricted common stock grants issued to nonemployees are accounted for at the estimated fair value of the underlying common stock. The fair values of the stock options and stock-based awards granted to nonemployees are remeasured as the services are performed and the awards vest, and the resulting change in value, if any, is recognized as expense during the period the related services are rendered.

**Concentrations of Credit Risk** The Company's financial instruments that are exposed to concentrations of credit risk consist of cash and cash equivalents in excess of the federally insured limits. The Company's cash and cash equivalents are deposited with high credit quality financial institutions and are primarily in demand deposit accounts. Substantially all ethanol sold through the Company's Agri-Energy subsidiary from the date of acquisition through December 31, 2010 was sold to C&N.

**Fair Value Measurements and Fair Value of Financial Instruments** Accounting standards define fair value, outline a framework for measuring fair value, and detail the required disclosures about fair value measurements. Under these standards, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or most advantageous market. Standards establish a hierarchy in determining the fair market value of an asset or liability. The fair value hierarchy has three levels of inputs, both observable and unobservable. Standards require the utilization of the highest possible level of input to determine fair value.

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*Level 1* inputs include quoted market prices in an active market for identical assets or liabilities.

*Level 2* inputs are market data, other than *Level 1*, that are observable either directly or indirectly. *Level 2* inputs include quoted market prices for similar assets or liabilities, quoted market prices in an inactive market, and other observable information that can be corroborated by market data.

*Level 3* inputs are unobservable and corroborated by little or no market data.

As of December 31, 2009 and 2010 there were no transactions measured at fair value on a nonrecurring basis. The following table shows assets and liabilities measured at fair value on a recurring basis as of December 31, 2009 and 2010 and the input categories associated with those assets and liabilities.

		Fair Value as of December 31, 2009	Fair Value Measurement Using		
			Level 1	Level 2	Level 3
Liabilities	Fair value of warrant liabilities	\$ (982,000)	\$	\$	\$ (982,000)
		December 31, 2010			
Liabilities	Fair value of warrant liabilities	\$ (2,034,000)	\$	\$	\$ (2,034,000)
Liabilities	Exchange-traded derivatives	\$ (405,000)	\$ (405,000)	\$	\$
Assets	Forward purchase contracts for corn	\$ 361,000	\$	\$ 361,000	\$

The changes in *Level 3* liabilities measured at fair value on a recurring basis for the years ended December 31, 2009 and 2010, are as follows:

		Fair Value of Warrant Liabilities
Liabilities:		
Balance	January 1, 2009, after cumulative effect of reclassification of warrants in accordance with FASB ASC 815	\$ 289,000
Initial measurement of warrants issued during the period		203,000
Change in fair value of warrants		490,000
Balance	December 31, 2009	\$ 982,000
Initial measurement of warrants issued during the period		177,000
Change in fair value of warrants		2,333,000
Warrants exercised during the period and liability reclassified to additional paid-in-capital		(1,458,000)
Balance	December 31, 2010	\$ 2,034,000

The carrying value of cash and cash equivalents, restricted cash, receivables, and accounts payable approximate their respective fair values due to the short-term nature of these instruments. Based on borrowing rates which management believes would currently be available to the Company for similar issues of debt, taking into account the current credit risk of the Company and other market factors, the carrying value of the Company's debt obligations approximate their fair value.

The fair value of exchange-traded derivative instruments is based on quoted market prices. The fair value of forward purchase contracts for corn is based upon the price at the delivery location adjusted for basis differentials, counterparty credit quality, the effect of the Company's own credit worthiness, the time value of money and/or the liquidity of the market.

## Edgar Filing: Gevo, Inc. - Form 10-K

The Company had current derivative liabilities relating to its preferred stock warrants. The derivative instruments were not originally entered into as hedging activities, and the change in fair value of warrant liabilities is recorded as a component of other income or expense in the consolidated statements of operations. The estimated fair value of the preferred stock warrant liabilities is revalued at each balance sheet date, with changes in value recorded as other income or expense in the consolidated statements of operations (Note 11).

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While the Company believes that its valuation methods are appropriate and consistent with other market participants, it recognizes that the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

**Environmental Liabilities** The Company's operations are subject to environmental laws and regulations adopted by various governmental authorities in the jurisdictions in which it operates. These laws require the Company to investigate and remediate the effects of the release or disposal of materials at its locations. Accordingly, the Company has adopted policies, practices and procedures in the areas of pollution control, occupational health and the production, handling, storage and use of hazardous materials to prevent material environmental or other damage, and to limit the financial liability which could result from such events. Environmental liabilities are recorded when the Company's liability is probable and the costs can be reasonably estimated. No environmental liabilities have been recorded as of December 31, 2010.

**Net Loss Per Share** Basic net loss per share is computed by dividing the net loss attributable to Gevo, Inc. common stockholders for the period by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing net loss attributable to Gevo, Inc. common stockholders for the period by the weighted-average number of dilutive common shares outstanding during the period. Dilutive shares outstanding are calculated by adding to the weighted shares outstanding any potential (unissued) shares of common stock and warrants based on the treasury stock method.

Diluted net loss per share is the same as basic net loss per share for all periods presented because any potential dilutive common shares were anti-dilutive. Such potentially dilutive shares are excluded from the computation of diluted net loss per share when the effect would be to reduce net loss per share. Therefore, in periods when a loss is reported, the calculation of basic and dilutive loss per share results in the same value.

The following table summarizes the Company's calculation of historical net loss per common share attributable to Gevo, Inc. stockholders:

	Year Ended December 31, 2008	Year Ended December 31, 2009	Year Ended December 31, 2010
Net loss attributable to Gevo, Inc. common stockholders	\$ (14,542,000)	\$ (19,885,000)	\$ (42,890,000)
Weighted-average common shares used in computing net loss per share of common stock-basic and diluted	1,051,848	1,100,294	1,145,500
Net loss per share of common stock attributable to Gevo, Inc. stockholders basic and diluted	\$ (13.83)	\$ (18.07)	\$ (37.44)

The following potentially dilutive securities were excluded from the calculation of diluted net loss per share during each period as the effect was anti-dilutive:

	Year Ended December 31, 2008	Year Ended December 31, 2009	Year Ended December 31, 2010
Convertible preferred stock upon conversion to common stock (as converted basis)(1)	7,986,956	12,603,439	16,329,703
Warrants to purchase convertible preferred stock (as converted basis)(1)	250,693	306,109	398,032
Warrants to purchase common stock		858,000	858,000
Outstanding stock options to purchase common stock	1,876,134	2,547,592	2,894,265
Unvested restricted common stock	86,971	35,807	5,729
Total	10,200,754	16,350,947	20,485,729

(1)

## Edgar Filing: Gevo, Inc. - Form 10-K

The convertible preferred stock and convertible preferred stock warrants were computed on an as-converted basis using a one-to-one conversion rate for all series of preferred stock, except for the Series D-1 preferred stock where the Company has used a conversion rate of 1.9022 which was the conversion rate applicable at the closing of the Company's initial public offering on February 14, 2011.

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**Recent Accounting Pronouncements** In January 2010, the FASB issued Accounting Standards Update (ASU) No. 2010-06, *Fair Value Measurements and Disclosures Improving Disclosures above Fair Value Measurements*, that requires entities to make new disclosures about recurring or nonrecurring fair-value measurements and provides clarification of existing disclosure requirements. This amendment requires disclosures about transfers into and out of Levels 1 and 2 and separate disclosures about purchases, sales, issuances, and settlements relating to Level 3 measurements. It also clarifies existing fair value disclosures about the level of disaggregation and about inputs and valuation techniques used to measure fair value. This amendment is effective for periods beginning after December 15, 2009, except for the requirement to provide the Level 3 activity of purchases, sales, issuances, and settlements, which will be effective for fiscal years beginning after December 15, 2010. The adoption did not have a material impact on the consolidated financial statements.

In December 2010, the FASB issued ASU No. 2010-29, *Business Combinations (Topic 805): Disclosure of Supplementary Pro Forma Information for Business Combinations*, to clarify the acquisition date that should be used for reporting the pro forma financial information disclosures in Topic 805 when comparative financial statements are presented. The update also expands the supplemental pro forma disclosures to include a description of the nature and amount of material, nonrecurring pro forma adjustments directly attributable to the business combination(s) included in the reported pro forma revenue and earnings. The amendments in this ASU are effective prospectively for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010. The Company does not expect the provisions of ASU 2010-29 to have a material effect on the financial position, results of operations or cash flows of the Company, however the Company may have additional disclosure requirements if the Company completes a business combination in the future.

## **2. Acquisition of Agri-Energy**

In September 2010, Gevo Development purchased all of the membership interests of Agri-Energy, LLC, a Minnesota limited liability company, and certain assets of Agri-Energy Limited Partnership, a Minnesota limited partnership, and acquired ownership of a 22 MGPY ethanol production facility located in Luverne, Minnesota, which it plans to retrofit for isobutanol production. The Company paid a purchase price of approximately \$20,602,000. In addition, the Company acquired and paid \$4,919,000 for working capital, resulting in a total amount paid of \$25,521,000. As of December 31, 2010, \$1,660,000 remained in escrow as security for seller indemnification obligations and, subject to any claims that are made, will be released in December 2011.

The acquisition of Agri-Energy was completed as part of the Company's strategy of acquiring access to ethanol production facilities for future retrofit to produce isobutanol. The acquisition was completed and Gevo Development acquired effective control of Agri-Energy on September 22, 2010. The assets acquired and liabilities assumed, and the results of Agri-Energy's operations for the period from September 23, 2010 through December 31, 2010, are reflected in the Company's consolidated financial statements as of and for the year ended December 31, 2010. The acquisition was accounted for under the acquisition method of accounting which requires, among other things, that all assets acquired and liabilities assumed be recognized at their fair values as of the acquisition date.

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The following table summarizes the estimated fair value of the assets acquired and liabilities assumed as of the acquisition date:

<b>Assets acquired:</b>	
Cash	\$ 585,000
Receivables	1,999,000
Inventory	3,570,000
Other current assets	1,256,000
Property, plant and equipment	20,602,000
<b>Total assets acquired</b>	<b>\$ 28,012,000</b>
<b>Liabilities assumed:</b>	
Accounts payable and accrued expenses	\$ 1,843,000
Other current liabilities	648,000
<b>Total liabilities assumed</b>	<b>\$ 2,491,000</b>
<b>Net assets acquired</b>	<b>\$ 25,521,000</b>

During the fourth quarter of 2010, the Company finalized the purchase price of Agri-Energy based on the final closing balance sheet which decreased the purchase price by \$83,000 from the estimated amount previously reported at September 30, 2010. The Company does not expect any changes to the purchase price reported above. The Company took certain actions and incurred certain costs associated with the transaction, which primarily consisted of legal and accounting fees. Such costs totaled \$1,327,000 and are recorded as selling, general and administrative expense.

The revenue and income from operations relating to Agri-Energy for the period from September 23, 2010 through December 31, 2010 was \$14,765,000 and \$1,025,000, respectively.

Pro forma results of operations for the Company as if the acquisition of Agri-Energy had occurred on January 1, 2009 are as follows (unaudited):

	<b>Year Ended December 31, 2009</b>	<b>Year Ended December 31, 2010</b>
Revenues	\$ 40,768,000	\$ 46,890,000
Loss from operations	\$ (17,990,000)	\$ (34,234,000)
Net loss	\$ (21,256,000)	\$ (40,187,000)

The pro forma results above include the combined results of operations of the Company and Agri-Energy, after making certain adjustments, for the years ended December 31, 2009 and 2010, as if the Agri-Energy acquisition had occurred on January 1, 2009. There were no transactions between the Company and Agri-Energy prior to the acquisition on September 22, 2010. There were no significant differences between the accounting policies of the Company and Agri-Energy. The unaudited pro forma results above are prepared for illustrative purposes only and are not necessarily indicative of the results of operations that would have actually been reported had the acquisition occurred on January 1, 2009 nor are they necessarily indicative of the future results of operations of the combined Company.



**Table of Contents****3. Property, Plant and Equipment**

A summary of property, plant and equipment by classification is as follows:

	<b>Estimated Useful Lives</b>	<b>December 31, 2009</b>	<b>December 31, 2010</b>
Computer, office equipment, and software	3 years	\$ 381,000	\$ 581,000
Lab equipment, furniture & fixtures and vehicle	5 years	3,015,000	3,432,000
Leasehold improvements	5 years(1)	380,000	380,000
Pilot plant	3 years	710,000	721,000
Demonstration plant	2 years(2)	2,587,000	2,948,000
Construction in progress			442,000
Land			410,000
Buildings, site improvements, plant machinery and equipment	10 years		20,093,000
Tools and support equipment	5 years		87,000
Total property, plant and equipment		7,073,000	29,094,000
Less accumulated depreciation and amortization		(2,441,000)	(5,629,000)
Property, plant and equipment net		\$ 4,632,000	\$ 23,465,000

- (1) Leasehold improvements are amortized over the term of the lease agreement or the service lives of the improvements, whichever is shorter.  
 (2) Depreciation related to the demonstration plant begins in the period such assets are placed in service. The demonstration plant was placed in service in September 2009. The demonstration plant is being depreciated over the remaining contractual term of the development agreement, as amended, with ICM which ends December 31, 2011 (Note 5).

Depreciation and amortization expense was \$678,000, \$1,511,000, and \$3,188,000 for the years ended December 31, 2008, 2009, and 2010, respectively, and \$5,692,000 for the period from June 9, 2005 (date of inception) to December 31, 2010.

**4. Inventories**

Inventory balances consisted of the following:

	<b>December 31, 2010</b>
Raw materials:	
Corn	\$ 2,516,000
Enzymes and other inputs	167,000
Finished goods:	
Ethanol	385,000
Distiller's grains	48,000
Work in process	301,000
Spare parts	348,000
Total inventory	\$ 3,765,000

The Company had no balance for inventories prior to the acquisition of Agri-Energy on September 22, 2010.

Included in cost of goods sold is depreciation of \$549,000 for the period from September 23, 2010 to December 31, 2010.



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### 5. Significant License, Research, and Other Agreements

*ICM* In October 2008, the Company signed development and commercialization agreements with ICM.

Under the terms of the development agreement, the Company will perform commercial-scale isobutanol production trials in ICM's research plant and facility in St. Joseph, Missouri, the demonstration plant. The Company is required to pay for or reimburse ICM for engineering fees, equipment, plant modification costs, and project fees. The development agreement was originally effective through December 31, 2010, and was amended in July 2010 to extend the effective date through December 31, 2011. The development agreement can be terminated by the Company with 30 days' written notice. During the years ended December 31, 2009 and 2010, the Company incurred \$2,587,000 and \$362,000, respectively, in capital expenditures with ICM relating to the demonstration plant that are recorded as property, plant and equipment in the Company's balance sheets. The Company incurred operating expenses paid to ICM for production trials at the demonstration plant and depreciation expense relating to the demonstration plant, which are recorded as research and development expense.

The term of the commercialization agreement is through October 16, 2018, and outlines the terms and fees under which ICM acts as the Company's exclusive provider of certain engineering and construction services. Also, under the commercialization agreement, the Company is ICM's exclusive technology partner for the production of butanols, pentanols, and propanols from the fermentation of sugars. In addition to amounts recorded under the development agreement noted above, the Company also engaged ICM to perform engineering studies, plant evaluations and other services.

During the year ended December 31, 2010, the Company incurred \$383,000 in capital expenditures with ICM relating to the retrofit of the Agri-Energy facility to future isobutanol production, which amounts are recorded as construction in progress on the Company's balance sheet at December 31, 2010.

Expenses incurred by the Company under its development, commercialization and other agreements with ICM are as follows:

	Year Ended December 31, 2008	Year Ended December 31, 2009	Year Ended December 31, 2010	Cumulative Amounts From June 9, 2005 (Date of Inception) To December 31, 2010
Research and development	\$ 30,000	\$ 1,353,000	\$ 2,269,000	\$ 3,652,000
Selling, general and administrative		12,000	80,000	92,000
Total expenses	\$ 30,000	\$ 1,365,000	\$ 2,349,000	\$ 3,744,000

*Cargill, Incorporated* During February 2009, the Company entered into a license agreement with Cargill, Incorporated ( "Cargill" ) to obtain certain biological materials and license patent rights to use a biocatalyst owned by Cargill. Under the agreement, Cargill has granted the Company an exclusive, royalty-bearing license, with limited rights to sublicense, to use the patent rights in a certain field, as defined in the agreement.

The agreement contains five milestone payments totaling approximately \$4,300,000 that are payable after each milestone is completed. During 2009, two milestones were completed and the Company recorded the related milestone amounts, along with an up-front signing fee, totaling \$875,000 to research and development expense. During March 2010, the Company completed milestone number three and recorded the related milestone amount of \$2,000,000 to research and development expense at its present value amount of \$1,578,000 because the milestone payment will be paid over a period greater than twelve months from the date it was incurred. At December 31, 2010, the present value of the liability, \$1,737,000, was recorded as \$924,000 in accounts payable and accrued expenses and \$813,000 in non-current liabilities. The accretion of the liability from March 2010 to December 31, 2010 was recorded to interest expense.

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Upon commercialization of a product which uses the Cargill biological material or is otherwise covered by the patent rights under this agreement, a royalty based on net sales is payable by the Company, subject to a minimum royalty amount per year, as defined in the agreement, and up to a maximum amount per year.

The agreement provides an option for Cargill to purchase a nonexclusive, royalty-bearing license for the use of a Gevo biocatalyst that utilizes the Cargill biological material or licensed patents for a royalty rate equal to the lowest rate offered to any third party.

The Company may terminate this agreement at any time upon 90 days' written notice. Unless terminated earlier, the agreement remains in effect until no licensed patent rights remain, but in no case before December 31, 2025.

*The Regents of the University of California (September 2007, License Agreement)* In September 2007, the Company entered into an exclusive license agreement, as amended, with The Regents of the University of California (The Regents) to obtain certain patent rights to inventions made in the course of research at the University of California.

The agreement requires the Company to pay for all costs related to obtaining and maintaining patents on the technology. Under the terms of the agreement, the Company is required to pay annual license maintenance fees, cash payments upon achievement of certain milestones, and royalties based on revenue from product utilizing the licensed technology. The Company has the right to issue sublicenses to third parties, subject to the payment of a percentage of sublicensing fees and royalty fees to The Regents. The Company can terminate the agreement at any time with 90 days' notice. The Regents can terminate the agreement if the Company fails to demonstrate performance of certain due diligence items as defined in the agreement. Unless terminated earlier in accordance with the agreement, the agreement remains in effect for the life of the last-to-expire patent in the licensed patent rights or until the last patent application licensed under this agreement is abandoned or no patent in the included patent rights ever issues.

Costs incurred by the Company are recorded as research and development expense except for legal-related fees that pertain to obtaining and maintaining patents on the technology, which are recorded as selling, general and administrative expense.

During the years ended December 31, 2008, 2009, 2010, and for the period from June 9, 2005 (date of inception) to December 31, 2010, the Company incurred costs of \$92,000, \$249,000, \$43,000 and \$465,000, respectively, under the license agreement.

*California Institute of Technology (July 2005, License Agreement)* In July 2005, the Company entered into a license agreement, as amended, with the California Institute of Technology (Caltech) to obtain certain patent rights and improvement rights in exchange for issuance of 200,000 shares of the Company's common stock. The term of the agreement shall continue until the expiration, revocation, invalidation, or unenforceability of the licensed patent rights and improvements licensed to the Company. The agreement has been amended to expand the field of the licensed products and improvements and to extend the right to improvements through July 12, 2013.

During the years ended December 31, 2008, 2009, 2010, and for the period from June 9, 2005 (date of inception) to December 31, 2010, the Company incurred costs of \$0, \$20,000, \$40,000 and \$219,000, respectively, under the license agreement.

*The Regents of the University of California (July 2008, Research Agreement)* In July 2008, the Company entered into a research agreement with The Regents. The agreement was terminated effective February 14, 2010. During the years ended December 31, 2008, 2009 and 2010, the Company recorded \$400,000, \$800,000 and \$225,000, respectively, as research and development expense under this agreement. For the period from June 9, 2005 (date of inception) to December 31, 2010, the Company recorded \$1,425,000 as research and development expense under this agreement.

*VIB* Effective May 1, 2009, the Company entered into a research agreement with VIB to engage in research-modifying yeast to improve the production of isobutanol. The term of the agreement ends April 30, 2011. During the years ended December 31, 2009 and 2010, the Company incurred \$424,000 and \$321,000, respectively, of

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research and development expense under this agreement. The Company may have to pay future milestone payments of up to approximately \$300,000 depending on the completion of four defined contract milestones. No milestones have been met or paid under this agreement as of December 31, 2010.

*Cargill, Incorporated (2010, Subcontractor Agreement)* During January 2010, the Company entered into a subcontractor agreement with Cargill to engage Cargill to provide research and development services to develop biological material that has been licensed by the Company. The agreement may require payment of up to \$1,500,000 through the term of the agreement, which ends August 31, 2011. Either party may cancel the agreement upon 30 days' written notice.

Within its research and development activities, the Company routinely enters into research and license agreements with various entities. Future royalty payments may apply under these license agreements if the technologies are used in future commercial products. In addition, the Company may from time to time make gifts to universities and other organizations to expand research activities in its fields of interest. Any amounts paid under these agreements are generally recorded as research and development expense as incurred.

The Company has been awarded grants or cooperative agreements from a number of government agencies, including the US Department of Energy, US National Science Foundation, US Environmental Protection Agency, Army Research Labs, and the US Department of Agriculture. Revenues recorded related to these grants and cooperative agreements for the years ended December 31, 2008, 2009, and 2010, and for the period from June 9, 2005 (date of inception) to December 31, 2010, were \$208,000, \$660,000, \$1,493,000 and \$2,736,000, respectively.

*C&N Ethanol Marketing (Ethanol Marketing Agreement)* Substantially all ethanol sold through the Company's Agri-Energy subsidiary from the date of the acquisition through December 31, 2010 was sold to C&N pursuant to an ethanol purchase and marketing agreement. The ethanol purchase and marketing agreement with C&N is effective through March 31, 2011 and automatically renews for subsequent one year terms unless either party terminates the agreement 60 days before the end of a term. Under the terms of the agreement, C&N will market substantially all of Agri-Energy's ethanol production from the Luverne, MN facility and will pay to Agri-Energy the gross sales price paid by the end customer less expenses and a marketing fee.

## **6. Gevo Development**

Gevo, Inc. formed Gevo Development on September 18, 2009 to finance and develop biorefineries through joint venture or direct acquisition. Biorefinery plants accessed through Gevo Development are intended to be retrofitted using Gevo, Inc.'s integrated fermentation technology to produce isobutanol.

Gevo, Inc. currently owns 100% of the outstanding equity interests of Gevo Development as a wholly owned subsidiary. Gevo Development has two classes of membership interests outstanding. Gevo, Inc. is the sole owner of the class A interests. Prior to September 22, 2010, CDP Gevo, LLC (CDP), which is beneficially owned by the two co-managing directors of Gevo Development, was the sole owner of the class B interests, which comprise 10% of the outstanding equity interests of Gevo Development. In September 2010, Gevo, Inc. became the sole owner of Gevo Development by acquiring 100% of the class B interests in Gevo Development from CDP pursuant to an equity purchase agreement. In exchange for the class B interests, CDP will receive aggregate consideration of up to approximately \$1,143,000, \$500,000 of which was paid on September 22, 2010, \$274,000 of which was paid on December 30, 2010, and the remainder of which is payable in five equal quarterly installments beginning in January 2011, subject to the terms and conditions set forth in the agreement.

The original issuance of the class B interests was considered to be a grant of non-employee stock compensation. As vesting of the awards was dependent on counterparty performance conditions (the acquisition and retrofit of a biorefinery plant), no compensation expense had been recorded prior to September 22, 2010 because the lowest aggregate fair value of the awards was zero. Upon the purchase of the class B interests on September 22, 2010, the Company recorded stock compensation of \$774,000, which reflected the amount paid during the year ended December 31, 2010 for the class B interests that was not dependent on counterparty performance. The Company will record the remaining amount, which is dependent on continued employment, when it is paid.

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Gevo, Inc. made capital contributions of \$750,000 and \$18,607,000 (which includes \$13,259,000 of cash used in the purchase of Agri-Energy), to Gevo Development during the years ended December 31, 2009 and 2010, respectively. No capital contributions had been made by CDP through September 21, 2010. For the years ended December 31, 2009 and 2010, Gevo Development (including Agri-Energy after September 22, 2010, the closing date of the acquisition) incurred a net loss of \$731,000 and \$2,327,000, respectively, which has been fully allocated to Gevo, Inc.'s capital contribution account based upon its capital contributions (for the period prior to September 22, 2010) and 100% ownership (for the period from September 22, 2010 through December 31, 2010). For financial reporting purposes prior to September 22, 2010, the income or loss allocated to the members of Gevo Development was determined using the hypothetical liquidation at book value method. Under this method, net income or loss is allocated between members by determining the difference between the amount of equity at the beginning of the reporting period and equity at the end of the reporting period, which would be distributed to each member if the entity were to be liquidated as of those dates. Distributions, when and if declared by the board of managers, were allocated, first, to each member for their estimated tax amount, then, for their unreturned capital contributions, and lastly, according to their distribution percentages. Allocation, distribution and voting percentages are determined in accordance with the First Amended and Restated Limited Liability Company Agreement of Gevo Development.

*Amended and Restated Warrant Agreement* The warrant agreement details the terms upon which Gevo, Inc. has granted a warrant, as amended, to CDP to purchase 858,000 shares of the common stock of Gevo, Inc. at an exercise price of \$2.70 per share, the estimated fair value of a share of Gevo, Inc.'s common stock at the time of entering into the warrant agreement. The warrant expires in September 2016, unless terminated earlier as provided in the agreement. The warrant shares were initially unvested and vested in increments upon the achievement of specific performance milestones. No amounts had been recorded for these warrants in the Company's consolidated statements of operations through September 21, 2010, as none of the counterparty performance milestones had been met; therefore, the lowest aggregate fair value of the award was zero.

On September 22, 2010, the beneficial owners of the equity interests of CDP became employees of Gevo, Inc. and the warrant agreement was amended and restated to provide that 50% of the warrant shares granted under such warrant agreement would vest on September 22, 2010. The remaining warrant shares will vest over a two-year period beginning on September 22, 2010, subject to acceleration and termination in certain circumstances, such as the occurrence of a change of control event. The Company valued the warrant at approximately \$13,956,000 on September 22, 2010, recognized 50% of this amount as stock-based compensation on September 22, 2010. The Company is and will recognize the remaining 50% over the 24 month vesting period that began on September 22, 2010.

When Gevo Development was formed in September 2009, Gevo, Inc., Gevo Development and CDP also entered into the following related agreements: a commercialization agreement, a guaranty agreement and an exchange agreement. In August and September 2010, the commercialization agreement, the guaranty agreement and the exchange agreement were all terminated.

*Commercialization Agreement* The commercialization agreement was terminated on September 22, 2010. The commercialization agreement set forth the services that Gevo, Inc. and CDP were to provide to Gevo Development. Gevo Development compensated CDP for its services through a quarterly management fee and the payment of bonuses upon achievement of established milestones. CDP was also granted a warrant as described above under the heading *Amended and Restated Warrant Agreement*. During the years ended December 31, 2009 and 2010, Gevo Development recorded \$528,000 and \$716,000, respectively, in fees and bonuses to CDP, which amounts were recorded as selling, general and administrative costs on the statements of operations.

*Guaranty Agreement* The guaranty agreement was terminated on September 22, 2010. In September 2009, in connection with the formation of Gevo Development and the execution of the commercialization agreement, Gevo, Inc. entered into a guaranty agreement pursuant to which Gevo, Inc. agreed to guarantee the financial obligations of Gevo Development to CDP under the commercialization agreement through the earlier of the termination of the commercialization agreement or December 31, 2011.

*Exchange Agreement* The exchange agreement was terminated on August 5, 2010. As described in the exchange agreement, if, upon a termination event, none of the parties owned a production facility, the class B

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interests would be immediately forfeited without consideration. Upon a fundamental event, as described in the exchange agreement and including a change in control, initial public offering, sale, or transfer of substantially all assets of Gevo, Inc., and other defined events, CDP's class B interests would convert into shares of Gevo, Inc.'s common stock based on their relative values, as defined, as of the closing of the fundamental event.

Gevo Development is considered to be a variable interest entity. As of and for the year ended December 31, 2009, Gevo, Inc. was considered to be the primary beneficiary as it absorbed the majority of the expected losses and residual returns of Gevo Development. Effective January 1, 2010, Gevo, Inc. adopted the amended provisions of FASB ASC 810, *Consolidation*. Under the amended provisions of ASC 810, as of and for the year ended December 31, 2010, Gevo Development continues to be a VIE and Gevo, Inc. is still considered to be the primary beneficiary as it has both (i) the power to direct the activities of Gevo Development that most significantly impact the entity's economic performance and (ii) the obligation to absorb losses of Gevo Development that could potentially be significant to the entity or the right to receive benefits from Gevo Development that could potentially be significant to the entity. As such, Gevo Development is consolidated. The accounts of Agri-Energy are consolidated within Gevo Development as a wholly owned subsidiary. As of December 31, 2010, Gevo Development does not have any assets that can be used only to settle obligations of Gevo Development. However, under the terms of the \$12.5 million loan and security agreement with TriplePoint, as amended, subject to certain limited exceptions, Agri-Energy is only permitted to pay dividends if certain conditions are satisfied. As of December 31, 2010, the creditors of Gevo Development have recourse to the general credit of Gevo, Inc. with the exception of \$4,785,000 that is recorded within current liabilities, which includes the liabilities of Agri-Energy. No gain or loss was recognized by the Company upon the initial consolidation of Gevo Development.

## 7. Secured Long-Term Debt

The carrying value of the secured long-term debt included in the Company's consolidated balance sheets at December 31, 2009 and 2010 consists of the following:

	December 31, 2009	December 31, 2010
Long-term debt, unpaid principal plus final/end-of-term payments	\$ 8,389,000	\$ 22,038,000
Less unamortized debt discounts for final/end-of-term payments and original fair value of warrants issued with debt	(688,000)	(1,606,000)
	7,701,000	20,432,000
Less current portion		(1,785,000)
Long-term portion of the long-term debt	\$ 7,701,000	\$ 18,647,000

**Lighthouse Loan and Security Agreement.** On December 18, 2006, Gevo, Inc. entered into a loan and security agreement, as amended, with Lighthouse Capital Partners V, L.P. ( "Lighthouse"). On August 6, 2010, the Company repaid \$5,000,000 in outstanding principal, as well as \$250,000 of the final payment, under the promissory note issued in connection with the loan and security agreement, using amounts borrowed pursuant to a loan and security agreement with TriplePoint Capital LLC ( "TriplePoint"), as well as available cash reserves. As of December 31, 2010, the Company's outstanding principal balance on its loan with Lighthouse was \$2,935,000. The promissory note bears interest at a rate of 12% per annum, required interest only payments during the year ended December 31, 2010, and requires principal plus interest repayments of equal amounts over the 18 months commencing January 1, 2011 and a final payment of \$204,000 due on July 1, 2012.

Under the terms of the loan agreement, the Company is prohibited from granting a security interest in its intellectual property assets to any other entity until Lighthouse is paid in full, and Lighthouse maintains a security interest in the assets, including equipment and fixtures, financed by the proceeds of each original loan advance made under the loan agreement until such time as the loan is paid in full. The Lighthouse agreement does not contain financial ratio covenants, but does impose certain affirmative and negative covenants, which include prohibiting the Company from paying any dividends or distributions or creating any liens against the

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collateral as defined in the agreement, as amended. The Company cannot borrow any further amounts under its agreement with Lighthouse. At December 31, 2010, the Company was in compliance with the Lighthouse debt covenants.

*TriplePoint Loan and Security Agreement 1.* In August 2010, concurrently with the execution of the acquisition agreement with Agri-Energy, Gevo, Inc. entered into a loan and security agreement with TriplePoint, pursuant to which it borrowed \$5,000,000. The loan and security agreement includes customary affirmative and negative covenants for agreements of this type and events of default, including, disposing of certain assets, granting or otherwise allowing the imposition of a lien against certain assets, incurring certain amounts of additional indebtedness, or acquiring or merging with another entity, excluding Agri-Energy, unless the Company receives the prior approval of TriplePoint. The aggregate amount outstanding under the loan and security agreement bears interest at a rate equal to 13%, is subject to an end-of-term payment equal to 8% of the amount borrowed and is secured by substantially all of the assets of Gevo, Inc., other than its intellectual property. The loan is also secured by substantially all of the assets of Agri-Energy, LLC. Additionally, under the terms of each of (i) the loan and security agreement and (ii) Gevo, Inc.'s guarantee of Gevo Development's and Agri-Energy's obligations under the loan and security agreement described below, Gevo, Inc. is prohibited from granting a security interest in its intellectual property assets to any other entity until both TriplePoint loans are paid in full. The loan matures on August 31, 2014, and provides for interest only payments during the first 24 months. An additional interest-only period may be elected now that Gevo, Inc. has completed an initial public offering and a subsequent interest-only period will become available in the event that Gevo, Inc. is producing isobutanol at its Agri-Energy facility by June 30, 2012. Each such additional interest-only period may be for a maximum of 6 months, for a total possible interest-only extension period of 12 months. Gevo, Inc. used the funds from this loan to repay a portion of its existing indebtedness with Lighthouse. At December 31, 2010, the Company was in compliance with the debt covenants under this loan and security agreement.

*TriplePoint Loan and Security Agreement 2.* In August 2010, Gevo Development also entered into a loan and security agreement with TriplePoint under which, upon the satisfaction of certain conditions, Gevo Development could borrow up to \$12.5 million to finance the transactions contemplated by the acquisition agreement with Agri-Energy. In September 2010, Gevo Development borrowed the \$12.5 million and closed the transactions contemplated by the acquisition agreement, at which time the loan and security agreement was amended and Agri-Energy, LLC became a borrower under the loan and security agreement. The loan and security agreement includes customary affirmative and negative covenants for agreements of this type and events of default. The aggregate amount outstanding under the loan and security agreement bears interest at a rate equal to 13% and is subject to an end-of-term payment equal to 8% of the amount borrowed. The loan is secured by the equity interests of Agri-Energy, LLC held by Gevo Development and substantially all the assets of Agri-Energy, LLC. The loan matures on September 1, 2014, and provides for interest only payments during the first 24 months. An additional interest-only period may be elected now that Gevo, Inc. has completed an initial public offering and a subsequent interest-only period will become available in the event that Gevo, Inc. is producing isobutanol at its Agri-Energy facility by June 30, 2012. Each such additional interest-only period may be for a maximum of 6 months, for a total possible interest-only extension period of 12 months. The loan is guaranteed by Gevo, Inc. pursuant to a continuing guaranty executed by Gevo, Inc. in favor of TriplePoint, which is secured by substantially all of the assets of Gevo, Inc., other than its intellectual property. At December 31, 2010, the Company was in compliance with the debt covenants under this loan and security agreement.

Interest expense related to the long-term debt for the years ended December 31, 2008, 2009 and 2010, and for the period from June 9, 2005 (date of inception) to December 31, 2010, was \$332,000, \$1,103,000, \$2,207,000 and \$3,782,000, respectively, of which \$50,000, \$235,000, \$762,000 and \$1,101,000, respectively, was for the accretion of debt discounts relating to the final/end-of-term payments, amortization of debt issue costs and the accretion of debt discounts relating to the grant date value of the warrants issued in connection with the debt.

During the year ended December 31, 2009, the Company made principal repayments of \$622,000. The Company repaid \$5,000,000 in outstanding principal, as well as \$250,000 of the final payment, on the Lighthouse debt during the year ended December 31, 2010.



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The following is a summary of principal maturities of long-term debt and the non-principal final/end-of-term payments as of December 31, 2010:

	<b>Principal</b>	<b>Final Payment</b>	<b>Total</b>
2011	\$ 1,897,000	\$	\$ 1,897,000
2012	3,167,000	204,000	3,371,000
2013	8,478,000		8,478,000
2014	6,892,000	1,400,000	8,292,000
	\$ 20,434,000	\$ 1,604,000	\$ 22,038,000

In connection with signing and borrowing under the loans with Lighthouse and TriplePoint, the Company issued warrants to purchase shares of the Company's preferred stock. The issuance date fair value of these warrants has been recorded as a debt discount against the debt ( debt discount ) and amortized to interest expense over the terms of the loans. These warrants, while they are exercisable for preferred stock, are considered to be derivative instruments (Note 11).

From December 2006 through December 31, 2009, the Company issued to Lighthouse warrants to purchase an aggregate of 169,247 shares of Company's convertible preferred stock at a weighted-average exercise price of \$5.38. These warrants converted to warrants exercisable for 169,247 shares of the Company's common stock upon completion of its initial public offering on February 14, 2011. The warrants issued to Lighthouse during the years ended December 31, 2006 through December 31, 2008, were valued on the issuance dates using an option-pricing model using a risk-free interest rate of between 3.00% and 4.43%, expected volatility of between 70% and 75%, no expected dividend yield and a term of seven years. The warrants issued to Lighthouse during the year ended December 31, 2009, were valued on the issuance dates using an option-pricing model using a risk-free interest rate of between 0.95% and 1.00%, expected volatility of between 68% and 94%, and a term of between 2.25 and 2.75 years.

In connection with signing and borrowing on the loans with TriplePoint in August and September 2010, the Company issued warrants to TriplePoint to purchase an aggregate of 105,140 shares of Series D-1 convertible preferred stock at an exercise price of \$17.12. The warrants became exercisable for 199,999 shares of the Company's common stock upon completion of its initial public offering on February 14, 2011. The warrants may be exercised until August 5, 2017.

The warrants issued to TriplePoint during August and September 2010, were valued on the issuance dates using an option-pricing model using a risk-free interest rate of 0.15%, expected volatility of between 49.14% and 61.90% and a term of 0.17 years.

**8. Convertible Promissory Notes**

During January 2008, the Company entered into a note and warrant purchase agreement ( Bridge Financing ) with certain investors, who were also holders of the Company's Series A and Series B preferred stock, and issued unsecured convertible promissory notes (the Notes ) and warrants to purchase shares of preferred stock. Under this agreement, the Company borrowed \$3,000,000. The outstanding principal balance of \$3,000,000 plus accrued interest of \$43,000 was converted into the Company's Series C preferred stock in March 2008 at a price of \$5.48 per share. In connection with the Bridge Financing and subsequent conversion into preferred stock, the Company issued warrants to acquire 136,862 shares of the Company's Series C preferred stock at a price of \$5.48 per share. The warrants expire in 2016. The fair value assigned to the warrants of \$505,000 was recorded as a discount on the Notes payable and was fully amortized to interest expense upon conversion of the Notes to Series C preferred stock in March 2008. The fair value of the warrants was calculated using a Black-Scholes model using a risk-free interest rate of 3.03%, expected volatility of 77%, no expected dividend yield, and a term of 10 years.

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In accordance FASB ASC 470-20, Debt *Debt with Conversion and Other Options*, the Company recorded \$505,000 of additional discount on the Notes to reflect the beneficial conversion feature associated with the conversion of the Notes to preferred stock. The discount was originally being amortized to interest expense from the date of issuance to maturity, December 31, 2008. Upon conversion of the Notes to Series C preferred stock in March 2008, the unamortized discount was recorded as interest expense. Interest expense recorded on the amortization of the discount related to the beneficial conversion feature was \$505,000 for the year ended December 31, 2008.

**9. Accounts Payable and Accrued Expenses**

Accounts payable and accrued expenses in the consolidated balance sheets at December 31, 2009 and 2010 consisted of the following:

	December 31, 2009	December 31, 2010
Accounts payable trade	\$ 591,000	\$ 4,818,000
Accrued expenses Cargill license agreement	600,000	924,000
Accrued employee compensation and related expenses	797,000	586,000
Accrued expenses ICM	337,000	163,000
Accrued deferred offering costs		548,000
Other accrued expenses	196,000	864,000
	\$ 2,521,000	\$ 7,903,000

**10. Capital Stock**

**Initial Public Offering** On February 14, 2011, the Company completed its initial public offering issuing 8,222,500 shares of common stock at an offering price of \$15.00 per share, resulting in net proceeds, after deducting underwriting discounts and commissions but before expenses, to the Company of approximately \$114.7 million. Additionally, the Company incurred estimated offering costs of \$4.3 million related to the initial public offering. Upon the closing of the initial public offering, the Company's outstanding shares of convertible preferred stock were automatically converted into 16,329,703 shares of common stock and the outstanding convertible preferred stock warrants were automatically converted into common stock warrants to purchase a total of 398,032 shares of common stock.

In connection with the closing of the initial public offering, on February 11, 2011 the Company amended and restated its certificate of incorporation to increase its authorized number of shares of common stock to 100,000,000 and to authorize the issuance of 5,000,000 shares of preferred stock. The holder of each share of common stock is entitled to one vote. The board of directors has the authority, without action by its stockholders, to designate and issue shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. The Company's amended and restated certificate of incorporation provides that the Company's board of directors will be divided into three classes, with staggered three-year terms and provides that all stockholder actions must be effected at a duly called meeting of the stockholders and not by a consent in writing. The amended and restated certificate of incorporation also provides that only the board of directors may call a special meeting of the stockholders and requires a 66 2/3% stockholder vote for the adoption, amendment or repeal of any provision of the Company's amended and restated bylaws and for the amendment or repeal of certain provisions of the Company's amended and restated certificate of incorporation.

As of December 31, 2010, the Company's authorized classes of capital stock consist of 30,000,000 shares of \$0.01 par value common stock and 15,246,000 shares of \$0.01 par value convertible preferred stock.

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**Convertible Preferred Stock** At December 31, 2010, the Company had designated the following classes of convertible preferred stock; a description of each is as follows:

*Series A-1, Series A-2, Series A-3, and Series A-4 (collectively referred to as Series A )* In August 2005, the Company issued 1,000,000 shares of \$0.01 par value Series A-1 preferred stock at \$0.50 per share. In February 2006, the Company issued 1,084,000 shares of \$0.01 par value Series A-2 preferred stock at \$0.83 per share. In October 2006, the Company issued 915,000 shares of \$0.01 par value Series A-3 preferred stock at \$1.75 per share. In April 2007, the Company issued 858,369 shares of \$0.01 par value Series A-4 preferred stock at \$2.33 per share.

*Series B* In July 2007, the Company issued 1,027,397 shares of \$0.01 par value Series B preferred stock at \$2.92 per share.

*Series C* In March 2008, the Company issued 3,102,190 shares of \$0.01 par value Series C preferred stock at \$5.48 per share through the conversion of convertible promissory Notes and accrued interest of \$3,043,000 (Note 8), as well as the receipt of additional proceeds of \$13,957,000.

*Series D* Between April and August 2009, the Company issued 4,616,483 shares of \$0.01 par value Series D preferred stock at \$7.04 per share. In connection with the Series D preferred stock offerings, the Company paid \$1,346,000 in issuance costs, which has been recorded as an offset to additional paid-in capital.

*Series D-1* Between March and May 2010, the Company issued 1,843,675 shares of Series D-1 preferred stock at a price of \$17.12 per share for gross cash proceeds of approximately \$31,564,000 and issued 58,412 shares of Series D-1 preferred stock at \$17.12 per share in exchange for \$1,000,000 of future services to be provided by ICM. The 58,412 shares issued to ICM in exchange for the credit against future services are fully vested, non-forfeitable and non-cancellable. In addition, ICM must pay a penalty of \$250,000 if future services are not provided according to the terms of the agreement. In aggregate, the Company issued a total of 1,902,087 shares of Series D-1 preferred stock at \$17.12 per share for \$32,564,000. As of December 31, 2010, the Company had \$294,000 remaining on its prepaid credit with ICM which is recorded in prepaid expenses and other current assets on the Company's balance sheet.

The Series A, Series B, Series C, Series D, and Series D-1 are collectively referred to as preferred stock.

The preferred stock outstanding as of December 31, 2010 has the following characteristics:

*Liquidation* In the event of a liquidation, dissolution, or winding up of the Company, prior to and in preference to any payments to holders of common stock, the holders of preferred stock shall be entitled to receive the amount of the original purchase price for each such series of preferred stock, plus all declared and unpaid dividends. If the assets of the Company are insufficient to permit payment in full to the holders of preferred stock, then the assets of the Company shall be distributed among the holders of preferred stock pro rata according to their respective liquidation preferences. After payment to all preferred stockholders, the remaining assets available for distribution shall be distributed to the holders of common stock. The occurrence of either a merger or an asset sale shall be deemed to be a liquidation event, unless such treatment is waived in writing by the holders of at least 65% of the preferred stock then outstanding.

The preferred shares authorized, issued, and outstanding and the aggregate preference on liquidation by preferred stock series as of December 31, 2010, is presented as follows:

	Shares Authorized	Shares Outstanding	Liquidation Preference
Series A	3,887,390	3,857,369	\$ 5,004,000
Series B	1,027,397	1,027,397	3,000,000
Series C	3,323,278	3,210,266	17,592,000
Series D	4,671,483	4,616,483	32,500,000
Series D-1	2,336,452	1,902,087	32,564,000
	15,246,000	14,613,602	\$ 90,660,000



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***Voting Rights*** Each holder of preferred stock is entitled to the number of votes equal to the number of shares of common stock into which each preferred share is convertible at the time of a vote. With certain exceptions, the holders of preferred stock vote together with the holders of common stock as one class. The certificate of incorporation, as amended, contained several protective provisions whereby at least 65% of the holders of preferred stock must approve certain corporate actions, such as the issuance of capital stock, changes to the authorized number of preferred shares, a merger or asset sale, declare or pay dividends, form a subsidiary, authorize a debt security and other actions as described in the certificate of incorporation. In addition, the holders of a majority of Series A, the holders of a majority of Series B, the holders of at least two-thirds of Series C, the holders of at least 70% of Series D, and the holders of at least 70% of Series D-1, each voting as a separate series, must approve certain corporate actions as described in the certificate of incorporation.

***Dividends*** The holders of preferred stock are entitled to receive, when, as, and if declared by the Board of Directors and out of funds legally available, noncumulative cash dividends at a rate of 8% per annum. Dividends on preferred stock are payable in preference and priority to any dividend on the common stock. Dividends on the preferred stock are not mandatory or cumulative. No dividends have been declared to date.

***Conversion*** For all series of preferred stock except Series D-1: Each share of preferred stock is convertible, at the option of the holder, into a number of common stock shares determined by dividing the respective preferred stock original issue price by the conversion price in effect at the time of conversion. The current conversion ratio is one share of preferred stock for one share of common stock and is subject to certain adjustments.

Each share of Series D-1 preferred stock is convertible into the number of shares of common stock determined by dividing the original issue price of the Series D-1 of \$17.12, as adjusted, by the conversion price of the Series D-1 in effect at the time of conversion. The initial conversion price for the Series D-1 is \$17.12, resulting in an initial conversion ratio that is one share of Series D-1 preferred stock for one share of common stock. In addition to the conversion price adjustments that are applicable to the other series of preferred stock, the conversion price of the Series D-1 adjusts upon the closing of an initial public offering or qualified financing. A qualified financing is defined as the first issuance of common stock or a new series of convertible preferred stock by Gevo, Inc. following the final closing of the Series D-1 financing. If the initial public offering or qualified financing had closed on or prior to December 31, 2010, the conversion price of the Series D-1 would have been adjusted to an amount equal to 75% of the offering price per share or price per share paid by investors in a qualified financing. If the initial public offering or qualified financing closes between January 1, 2011 and September 30, 2011, the conversion price of the Series D-1 is adjusted to an amount equal to 60% of the offering price per share or price per share paid by investors in a qualified financing. If an initial public offering or qualified financing has not occurred by September 30, 2011, then the conversion ratio adjusts such that each share of Series D-1 preferred stock is convertible into two shares of common stock. If a merger or asset sale occurs, as defined in the amended and restated certificate of incorporation, on or prior to September 30, 2011, then the conversion ratio adjusts so that each share of Series D-1 preferred stock is convertible into one and one-half shares of common stock. On February 14, 2011, the Company completed its initial public offering of 8,222,500 shares of common stock at an offering price of \$15.00 per share. Based on the offering price of \$15.00 per share, the conversion rate was calculated as 1.9022 shares of common stock for each share of Series D-1 preferred stock.

The Series D-1 preferred stock was considered to have a beneficial conversion feature because the conversion ratio adjusts from the initial conversion rate of one common share for each preferred share to two common shares for each preferred share if an initial public offering or qualified financing has not occurred on or before September 30, 2011. At the issuance dates of the Series D-1 between March and May 2010, the Company recorded the beneficial conversion feature at its aggregate intrinsic value of approximately \$5,744,000 as a discount on the preferred stock with a corresponding credit to additional paid-in-capital. This discount was being recorded as a deemed dividend and amortized as a debit to retained earnings and a credit to additional paid-in-capital during the period from March 26, 2010 to September 30, 2011.

For the period from January 1, 2011 to the closing of the Company's initial public offering on February 14, 2011, the Company recorded a deemed dividend amortization of beneficial conversion feature on the Series D-1 convertible preferred stock of \$495,000 relating to the issuance of Series D-1 convertible preferred stock. Upon

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closing of the initial public offering on February 14, 2011 and the automatic conversion of the Company's Series D-1 preferred stock to common stock, the Company recalculated the intrinsic value of the beneficial conversion feature using the adjusted conversion ratio applied against the original commitment-date estimated fair value of the underlying common stock. The amount of the recalculated intrinsic value of the beneficial conversion feature exceeded the previously amortized amount of the beneficial conversion feature by \$599,000, which amount was immediately amortized to retained earnings and additional paid-in-capital contemporaneously with the closing of the initial public offering. After the entries recorded through, and upon, the closing of the Company's initial public offering, no additional amortization of the beneficial conversion feature relating to the Series D-1 preferred stock will be recorded.

All series of preferred stock contain a provision to adjust the original conversion price in the event subsequent shares are sold at a price less than the conversion price and for events such as a stock split. All preferred stock converts into common stock upon the affirmative election of the holders of at least 65% of the outstanding preferred shares, or immediately prior to the closing of an underwritten public stock offering that raises gross proceeds of at least \$50,000,000 and a price per share of at least \$15.00, subject to certain adjustments.

**Redemption** The preferred stock is not redeemable.

**Common Stock** Each share of common stock is entitled to one vote. The holders of common stock are entitled to receive dividends whenever funds are legally available and when declared by the Board of Directors, subject to the prior rights of all holders of all classes of stock outstanding.

**Warrants** As of December 31, 2010, the Company has issued and outstanding 858,000 warrants to CDP (Note 6) that are exercisable into common stock and 303,173 warrants to TriplePoint, Lighthouse and investors (Notes 7 and 8) that are exercisable into preferred stock. These 303,173 warrants became exercisable for 398,032 shares of the Company's common stock upon completion of the Company's initial public offering on February 14, 2011.

In September 2010, a holder of Series C preferred stock warrants exercised its warrant to purchase 108,076 shares of Series C preferred stock at an exercise price of \$5.48 per share resulting in total proceeds to the Company in the amount of \$592,000. Upon exercise of the warrant, the Company reclassified \$1,458,000 from preferred stock warrant liability to equity.

**2006 Omnibus Securities and Incentive Plan** During 2006, the Company established the Gevo, Inc. 2006 Omnibus Securities and Incentive Plan (the "2006 Incentive Plan"). Pursuant to the 2006 Incentive Plan, the Company may grant stock awards to employees, directors, and consultants of the Company. As of December 31, 2010, the Company has authorized 3,254,853 shares of common stock to be issued through the grant of stock awards pursuant to the 2006 Incentive Plan (Note 13).

## **11. Preferred Stock Warrant Liabilities**

Effective January 1, 2009, the Company adopted the provisions of Emerging Issues Task Force (EITF) 07-05, *Determining Whether an Instrument (or Embedded Feature) Is Indexed to an Entity's Own Stock*, which was primarily codified into FASB ASC 815, *Derivatives and Hedging* (ASC 815). As a result of adopting ASC 815, warrants to purchase shares of the Company's preferred stock previously treated as equity were reclassified as derivative liabilities. As such, effective January 1, 2009, the Company reclassified the fair value of these preferred stock warrants from equity to liability status as if these warrants were recorded as a derivative liability since their dates of issuance due to the preferred stock having down-round protection. As a result of this change in accounting principle, on January 1, 2009, the Company recorded these liabilities at their fair value of \$289,000 and recorded a cumulative catch-up adjustment of \$585,000 to reduce the accumulated deficit account and reduced additional paid-in capital by \$874,000. The adjustment to accumulated deficit (the cumulative income effect of the accounting change) was calculated for the change in the fair value of the warrants from the date of their issuance through January 1, 2009.

As of December 31, 2009 and 2010, the fair value of preferred stock warrants was estimated to be \$982,000 and \$2,034,000, respectively, using the option-pricing method. The Company recorded a \$490,000 and \$2,333,000 non-cash charge related to the change in fair value of preferred stock warrants for the years ended December 31,

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2009 and 2010, respectively. These warrant liabilities are marked to fair value from January 1, 2009 resulting in the recognition of gain or loss in the Company's consolidated statements of operations as gain or loss from change in fair value of warrant liabilities from that date.

Due to the nature of these derivative instruments, the instruments contain no credit-risk-related contingent features. Upon the closing of the Company's initial public offering on February 14, 2011, the preferred stock warrants converted to common stock warrants and the related preferred stock warrant liability was reclassified to additional paid-in capital and will no longer be marked to fair value.

To value its preferred stock warrants and common stock as of December 31, 2010, the Company first estimated its enterprise value and then allocated this value to the underlying classes of equity using the option pricing method as outlined in the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation (AICPA Practice Aid). In estimating the enterprise value, the Company used a scenario analysis incorporating probabilities of future events for existing stockholders of an initial public offering, M&A, or liquidation to calculate an overall enterprise value of the Company. The enterprise value was then allocated to the common stock, preferred stock and preferred stock warrants using the option-pricing method. To calculate the enterprise value in the initial public offering and M&A scenarios, the Company used an income approach, which incorporated a discounted cash flow valuation. This approach requires a projection of the cash flows that the business expects to generate over a forecast period and an estimate of the present value of cash flows beyond that period, which is referred to as terminal value. These cash flows are converted to present value by means of discounting, using a rate of return that accounts for the time value of money and the appropriate degree of risks inherent in the business. The orderly liquidation scenario considered the total preferences of the preferred stockholders assuming no further rounds of financing after Series D-1. To allocate the enterprise value to the underlying classes of equity, the Company used the option-pricing method. The following table summarized the assumptions used in these analyses:

	January 1, 2009	December 31, 2009	December 31, 2010
Risk-free interest rate	1.00%	1.14%	0.07%
Expected volatility factor	67.50%	91.60%	49.14%
Expected time to a liquidity event (in years)	3	2	0.08

The table below summarizes the preferred stock warrants that were issued by the Company and recorded as a liability as of January 1, 2009, December 31, 2009 and December 31, 2010.

Type of Preferred Stock Warrants	Year(s) of Issuance	Number of Warrant Shares Originally Granted	Number of Warrant Shares Outstanding at December 31, 2010	Exercise Price	Issuance Date Original Value Assigned	Fair Value of Warrants Outstanding at January 1, 2009	Fair Value of Warrants Outstanding at December 31, 2009	Fair Value of Warrants Outstanding at December 31, 2010
Series A-3 preferred stock warrant	2006, 2007	15,000	15,000	\$ 1.75	\$ 18,000	\$ 30,000	\$ 68,000	\$ 197,000
Series A-4 preferred stock warrant	2007, 2008	15,021	15,021	2.33	27,000	27,000	65,000	189,000
Series C preferred stock warrant	2008, 2009	113,012(1)	113,012	5.48	432,000	118,000	356,000	1,065,000
Series C preferred stock warrant	2008	108,076(1)		5.48	398,000	114,000	341,000	
Series D preferred stock warrant	2009	55,000	55,000	7.04	202,000		152,000	432,000
Series D-1 preferred stock warrant	2010	105,140	105,140	17.12	177,000			151,000
		411,249	303,173(2)		\$ 1,254,000	\$ 289,000	\$ 982,000	\$ 2,034,000





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- (1) In September 2010, a holder of Series C preferred stock warrants exercised its warrant to purchase 108,076 shares of Series C preferred stock at a price of \$5.48 per share. As such, there were 113,012 Series C preferred stock warrants outstanding at December 31, 2010.
- (2) These 303,173 warrants became exercisable for 398,032 shares of the Company's common stock upon completion of the Company's initial public offering on February 14, 2011.

Preferred stock warrants were initially issued in connection with the issuance of secured long-term debt and convertible promissory notes (Notes 7 and 8). The warrants were not issued with the intent of effectively hedging any exposures to cash flow, market, or foreign currency risks.

**12. Derivatives and Hedging**

Since the acquisition of Agri-Energy on September 22, 2010, the Company's activities expose it to a variety of market risks, including the effects of changes in commodity prices. These financial exposures are monitored and managed by the Company as an integral part of its overall risk-management program. The Company's risk management program focuses on the unpredictability of financial and commodities markets and seeks to reduce the potentially adverse effects that the volatility of these markets may have on its operating results.

The Company periodically enters into forward purchase contracts for corn and natural gas to ensure supply and manage the prices of these commodities. These contracts are considered to be derivative transactions, are valued at market price and are recorded as derivative assets or derivative liabilities in the consolidated balance sheet. Changes in market price are recorded in cost of goods sold.

The Company generally follows a policy of using exchange-traded futures contracts to reduce its net position in merchandisable agricultural commodity inventories and forward cash purchase contracts to reduce price risk. Exchange-traded futures contracts are valued at market price and are recorded as derivative assets or derivative liabilities in the consolidated balance sheet. Changes in market price are recorded in cost of goods sold.

The Company's derivatives do not include any credit risk related contingent features. For the exchange-traded contracts, the Company maintains a margin deposit. At December 31, 2010, the Company recorded a margin deposit of \$624,000. The Company has not designated any of its derivatives as hedges for financial accounting purposes. The Company did not have any derivative assets or liabilities prior to September 22, 2010 other than the preferred stock warrants described in Note 11. The fair value of its derivatives, which are marked to market each period, as well as the location within its combined balance sheet, by major category, is summarized as follows:

	December 31, 2010
<b>Balance Sheet Line Item</b>	
Derivative Liabilities Not Designated as Hedging Instruments:	
Exchange-traded commodity derivatives derivative liability current	\$ (405,000)
Derivative Assets Not Designated as Hedging Instruments:	
Forward purchase corn contracts derivative asset current	\$ 361,000
Changes in value of derivative instruments are recorded in the consolidated statements of operations. The following table summarizes these amounts and the location within the consolidated statements of operations where such amounts are reflected. In addition to the unrealized gains and losses noted below, the Company incurred realized losses of \$1,098,000 on its exchange-traded futures contracts during the year ended December 31, 2010, which has been recorded within cost of goods sold.	

	Year Ended December 31, 2010
<b>Statement of Operations Location</b>	
Exchange-traded commodity derivative cost of goods sold unrealized (gains)/losses	\$ (243,000)
Forward purchase corn derivative cost of goods sold unrealized (gains)/losses	\$ (318,000)



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The following table represents the Company's net long and short positions. All of these positions are expected to settle within the next year. The Company did not have any outstanding forward purchase contracts for natural gas as of December 31, 2010.

Year of Expiration	December 31, 2010 Corn Net Long (Short) Position Bushels
2011	(309,000)

**13. Stock-Based Compensation**

**Stock Options** The Company has stock-based compensation plans under which it awards stock options to its employees and certain nonemployees. The vesting period and maturity of each option is determined at the date of grant. The term of an option cannot exceed 10 years. The options are subject to forfeiture if certain vesting requirements are not met. At December 31, 2010, there were 171,931 shares available for grant under the 2006 Incentive Plan.

A summary of stock option activity for grants to employees and nonemployees for each of the three years in the period ended December 31, 2010, is presented below:

	Number of Options	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Options outstanding December 31, 2007	1,110,907	\$ 0.45		
Granted	867,959	1.11		
Canceled or forfeited	(83,577)	(0.40)		
Exercised	(19,155)	(0.31)		
Options outstanding December 31, 2008	1,876,134	0.76		
Granted	863,720	2.70		
Canceled or forfeited	(191,428)	(0.79)		
Exercised	(834)	(0.49)		
Options outstanding December 31, 2009	2,547,592	\$ 1.42	8.59	\$ 3,272,000
Granted	446,880	\$ 10.45		
Canceled or forfeited	(68,660)	(1.03)		
Exercised	(31,547)	(0.52)		
Options outstanding December 31, 2010	2,894,265	\$ 2.83	7.90	\$ 34,936,000
Options fully vested and exercisable December 31, 2010	1,976,948	\$ 2.51	7.75	\$ 24,501,000
Options expected to vest, including effects of expected forfeitures December 31, 2010	848,553	\$ 3.55	8.19	\$ 9,631,000

Additional information related to our stock options is summarized below:

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	Years Ended December 31,			Cumulative Amounts From June 9, 2005 (Date of Inception) To December 31, 2010
	2008	2009	2010	
Weighted-average grant-date fair value of option awards granted	\$ 1.44	\$ 1.92	\$ 6.99	\$ 2.11
Intrinsic value of options exercised (determined as of the date of option exercise)	\$ 18,000	\$ 2,000	\$ 69,000	\$ 89,000
Proceeds received from the exercise of stock options	\$ 6,000		\$ 16,000	\$ 22,000
Grant date fair value of options vested	\$ 436,000	\$ 1,222,000	\$ 2,668,000	\$ 4,440,000

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As of December 31, 2010, the Company had \$2,253,000 of total unrecognized compensation expense, net of estimated forfeitures, which is expected to be recognized over a weighted-average period of 1.82 years.

The Company settles employee stock option exercises with newly issued common shares. No tax benefits were realized by the Company in connection with these exercises as the Company maintains net operating loss carryforwards and has established a valuation allowance against the entire tax benefit.

Information about stock options outstanding and exercisable at December 31, 2010, is as follows:

Options Outstanding			Options Exercisable		
Exercise Price	Number of Options	Weighted-Average Remaining Contractual Life in Years	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life in Years
\$0.17	33,300	5.17	33,300	\$ 0.17	5.17
\$0.46 \$0.49	888,446	6.47	711,708	\$ 0.47	6.47
\$1.16	662,959	7.62	418,509	\$ 1.16	7.61
\$2.70	862,780	8.88	551,051	\$ 2.70	8.88
\$10.07	381,930	9.43	262,039	\$ 10.07	9.43
\$12.67	64,950	9.69	341	\$ 12.67	9.69

The fair value of the stock options granted in the years ended December 31, 2008, 2009 and 2010, were estimated using the following assumptions.

	Options Granted in Year 2008		Options Granted in Year 2009		Options Granted in Year 2010	
Risk-free interest rate	1.92%	4.43%	2.15%	2.55%	1.85%	2.53%
Expected dividend yield	None		None		None	
Expected volatility factor	70%	75%	76%	80%	76%	80%
Expected option life (in years)	4.87	6.08	5.08	6.07	5.00	6.08
Expected forfeitures	0%	5%	0%	5%	0%	5%

The risk-free interest rate was based on the US Treasury yield curve in effect during the year of grant for instruments with a term similar to the expected life of the related option. The volatility factor was determined based upon management's estimate using inputs from comparable public companies. Due to the Company's limited history of grant activity, the expected life of options granted was estimated using the simplified method in accordance with Staff Accounting Bulletin 110, where the expected life equals the arithmetic average of the vesting term and the original contractual term of the options. No dividends are expected to be paid. Forfeitures have been estimated by the Company based upon historical and expected forfeiture experience.

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Stock-based compensation included in the Company's consolidated statements of operations, is as follows:

	Years Ended December 31,			Cumulative Amounts From June 9, 2005 (Date of Inception) To December 31, 2010
	2008	2009	2010	
Stock options issued to nonemployees:				
Research and development	\$ 8,000	\$ 31,000	\$ 142,000	\$ 181,000
Selling, general and administrative	11,000	47,000	106,000	164,000
Stock options issued to employees:				
Research and development	50,000	173,000	470,000	717,000
Selling, general and administrative	90,000	624,000	1,872,000	2,607,000
Restricted stock issued to nonemployees:				
Research and development	48,000	70,000	70,000	200,000
Warrant issued to CDP:				
Selling, general and administrative			7,851,000	7,851,000
Purchase of class B interests of Gevo Development from CDP:				
Selling, general and administrative			774,000	774,000
<b>Total stock-based compensation</b>	<b>\$ 207,000</b>	<b>\$ 945,000</b>	<b>\$ 11,285,000</b>	<b>\$ 12,494,000</b>

*Stock Option Grants to Nonemployees* During the years ended December 31, 2008, 2009 and 2010, the Company granted options to purchase 155,000, 10,000 and 12,891 shares, respectively, of common stock to nonemployees. Options granted to nonemployees are periodically revalued as services are performed and the options vest. During the years ended December 31, 2009 and 2010, 73,333 and 51,667 options, respectively, granted to non-employees during 2008 were canceled.

*Restricted Stock* The Company has stock-based compensation plans under which it has awarded restricted common stock to nonemployee consultants. The vesting period of each restricted share is determined at the date of grant. The shares are subject to forfeiture if certain vesting requirements are not met. The Company records stock-based compensation on restricted stock grants over the vesting period. In accordance with applicable standards, stock-based awards granted to nonemployees are periodically revalued as services are performed and the awards vest.

Activity and related information for the Company's restricted common stock awards for each of the three years in the period ended December 31, 2010, is summarized as follows:

	Number of Shares	Weighted- Average Grant-Date Fair Value
Nonvested December 31, 2007	153,121	\$ 0.39
Granted	50,000	0.49
Vested	(51,567)	(0.41)
Canceled or forfeited	(64,583)	(0.41)
<b>Nonvested December 31, 2008</b>	<b>86,971</b>	<b>\$ 0.42</b>
Granted		
Vested	(37,634)	(0.41)
Canceled or forfeited	(13,530)	(0.35)

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Nonvested	December 31, 2009	35,807	\$	0.45
Granted				
Vested		(7,812)		(0.49)
Canceled or forfeited		(22,266)		(0.43)
Nonvested	December 31, 2010	5,729	\$	0.49

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The shares of restricted stock generally vest over periods from four to six years. The grant date fair value of shares granted during 2008 was \$25,000. As of December 31, 2010, the total unrecognized compensation expense, net of forfeitures, relating to restricted stock awards was \$86,000, which is expected to be recognized over a weighted-average period of 0.84 years.

**14. Income Taxes**

There is no provision for income taxes because the Company has incurred operating losses since inception. As of December 31, 2010, the Company had federal and state net operating loss carryforwards of approximately \$66,300,000 and \$65,700,000, respectively, which may be used to offset future taxable income. The Company also had federal research and development tax credit carryforwards and other federal tax credit carryforwards which aggregate to \$1,700,000. These carryforwards expire at various times through 2030 and may be limited in their annual usage by Section 382 of the Internal Revenue Code, as amended, relating to ownership changes.

The tax effects of temporary differences that give rise to significant portions of the Company's net deferred tax assets at December 31, 2009 and 2010, are as follows:

	December 31,	
	2009	2010
Deferred tax assets:		
Net operating loss carryforwards	\$ 14,888,000	\$ 25,400,000
Research and other credits	748,000	1,700,000
Other temporary differences	670,000	4,700,000
Net deferred tax assets before valuation allowance	16,306,000	31,800,000
Valuation allowance	(16,306,000)	(31,800,000)
Net deferred tax assets after valuation allowance	\$	\$

The Company's deferred tax assets represent an unrecognized future tax benefit. The Company has provided a full valuation allowance on its deferred tax asset at December 31, 2010, as management believes it is more likely than not that the related deferred tax asset will not be realized. The reported amount of income tax expense differs from the amount that would result from applying domestic federal statutory tax rates to pretax losses, primarily because of changes in the valuation allowance. Reconciling items from income tax computed at the statutory federal rate for the years ended December 31, 2008, 2009, and 2010, were as follows:

	2008	2009	2010
Federal income tax at statutory rate	35.0%	35.0%	35.0%
State income taxes, net of federal benefits	3.3%	3.0%	3.4%
Research and other credits	2.5%	1.3%	2.4%
Permanent adjustments	(2.8%)	(1.4%)	(2.6%)
Valuation allowance	(38.0%)	(37.7%)	(38.2%)
Other	0.0%	(0.2%)	(0.0%)
Effective tax rate	0.0%	0.0%	0.0%

The Company accounts for uncertain tax positions under FASB ASC 740, *Income Taxes* (previously FIN No. 48). The Company has concluded that there are no significant uncertain tax positions requiring recognition in the consolidated financial statements. The Company's evaluation was performed for the tax periods from January 1, 2005 (date of inception) to December 31, 2010, which remain subject to examination by major tax jurisdictions as of December 31, 2010.

The Company may from time to time be assessed interest or penalties by major tax jurisdictions, although there have been no such assessments historically, with material impact to its financial results. In the event it receives an assessment for interest and/or penalties, such an assessment would be classified in the consolidated financial statements as income tax expense.





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### **15. Employee Benefit Plan**

The Company's employees participate in the Gevo, Inc. 401(k) Plan ( "401(k) Plan" ). Subject to certain eligibility requirements, the 401(k) Plan covers substantially all employees after three months of service with quarterly entry dates. Employee contributions are deposited by the Company into the 401(k) Plan and may not exceed the maximum statutory contribution amount. The Company may make matching and/or discretionary contributions to the 401(k) Plan. Effective January 1, 2008, the Company began providing an employer match of 100% up to a maximum of 5% of compensation per employee, which vests over a period of approximately two years. During the years ended December 31, 2008, 2009 and 2010, the Company recorded \$123,000, \$200,000 and \$263,000, respectively, in matching contributions. During the period from June 9, 2005 (date of inception) to December 31, 2010, the Company recorded \$586,000 in matching contributions.

### **16. Related-Party Transactions**

A founder, consultant and former director of the Company is also a professor at Caltech, which is a party to a license agreement (Note 5) and research agreements. This founder, consultant and former director is also a common stockholder and option holder of the Company.

Convertible unsecured promissory Notes were issued to certain investors, who were also holders of the Company's preferred stock, in January 2008 (Note 8) which were settled through issuance of preferred stock in 2008.

The co-managing directors of Gevo Development beneficially own 100% of the equity interests of CDP. CDP holds a warrant for common stock of Gevo, Inc. (Note 6). Effective September 22, 2010, the co-managing directors are each employees of Gevo, Inc.

The Company has entered into new employment agreements with its chief executive officer and five additional executives of the Company that took effect upon the consummation of the Company's initial public offering in February 2011. These agreements superseded the employees' previous agreements, where applicable, and provide for an annual salary, performance cash bonus, annual stock incentive awards and health and other benefits commensurate with the position. These agreements, in certain situations, also provide cash payments and acceleration of unvested equity awards upon a change in control or termination of employment.

### **17. Commitments and Contingencies**

**Leases** In November 2007, the Company signed an operating lease for its office, research, and production facility in Englewood, Colorado ( "Colorado facility" ) with a term expiring July 31, 2013. The Company also maintains a corporate apartment in Colorado, which has a lease term expiring during the next twelve months.

Beginning in February 2008, substantially all of the Company's employees and functions were located in the Colorado facility. During the year ended December 31, 2008, pursuant to its relocation of primary business offices and operations from California to Colorado, the Company incurred \$706,000 in moving and relocation costs, which were recorded as selling, general and administrative expense in the consolidated statements of operations in 2008.

Rent expense for the years ended December 31, 2008, 2009, and 2010, and the period from June 9, 2005 (date of inception) to December 31, 2010, was \$619,000, \$514,000, \$567,000 and \$2,121,000, respectively. The Company recognizes rent expense on its facility operating leases on a straight-line basis.

**Years Ending December 31**

\$ 1,288,000

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**Segment Information** The Company's chief operating decision maker is provided with and reviews the financial results of each of the Company's consolidated legal entities, Gevo, Inc., Gevo Development, LLC, and Agri-Energy, LLC. All revenue is earned, and all assets are held, in the US. Prior to the acquisition of Agri-Energy, the financials of Gevo Development were aggregated with Gevo, Inc. due to its size compared to Gevo, Inc. and were not reported separately. For purposes of the table below, the Company has broken out the historical information of Gevo Development. The results of Gevo Development and Agri-Energy have been combined in the following table:

	Year Ended December 31, 2008	Year Ended December 31, 2009	Year Ended December 31, 2010
<b>Revenues:</b>			
Gevo, Inc.	\$ 208,000	\$ 660,000	\$ 1,631,000
Gevo Development/Agri-Energy			14,765,000
Intercompany eliminations			
	\$ 208,000	\$ 660,000	\$ 16,396,000
<b>Operating income (loss):</b>			
Gevo, Inc.	\$ (13,311,000)	\$ (17,838,000)	\$ (33,809,000)
Gevo Development/Agri-Energy		(731,000)	(1,704,000)
Intercompany eliminations			
	\$ (13,311,000)	\$ (18,569,000)	\$ (35,513,000)
<b>Interest expense:</b>			
Gevo, Inc.	\$ 1,385,000	\$ 1,103,000	\$ 1,751,000
Gevo Development/Agri-Energy			623,000
Intercompany eliminations			
	\$ 1,385,000	\$ 1,103,000	\$ 2,374,000
<b>Depreciation Expense:</b>			
Gevo, Inc.	\$ 678,000	\$ 1,511,000	\$ 2,639,000
Gevo Development/Agri-Energy			549,000
Intercompany eliminations			
	\$ 678,000	\$ 1,511,000	\$ 3,188,000
<b>Total assets:</b>			
Gevo, Inc.	\$ 13,094,000	\$ 26,307,000	\$ 34,259,000
Gevo Development/Agri-Energy		124,000	47,993,000
Intercompany eliminations		(48,000)	(30,643,000)
	\$ 13,094,000	\$ 26,383,000	\$ 51,609,000
<b>Acquisitions of plant, property and equipment:</b>			
Gevo, Inc.	\$ 2,360,000	\$ 2,982,000	\$ 806,000
Gevo Development/Agri-Energy (1)			
Intercompany eliminations			
	\$ 2,360,000	\$ 2,982,000	\$ 806,000

- (1) Excludes property, plant and equipment acquired in the Agri-Energy acquisition.

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The following 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:

<b>Year ended December 31, 2010</b>	<b>First Quarter</b>	<b>Second Quarter</b>	<b>Third Quarter</b>	<b>Fourth Quarter</b>	<b>Total</b>
Revenues	\$ 330,000	\$ 462,000	\$ 1,496,000	\$ 14,108,000	\$ 16,396,000
Gross margin	330,000	462,000	640,000	1,518,000	2,950,000
Loss from operations	(6,980,000)	(7,619,000)	(14,515,000)	(6,399,000)	(35,513,000)
Net loss	(7,859,000)	(8,601,000)	(17,308,000)	(6,344,000)	(40,112,000)
Net loss attributable to Gevo, Inc. common stockholders	(7,880,000)	(9,380,000)	(18,297,000)	(7,333,000)	(42,890,000)
Net loss per share	\$ (7.02)	\$ (8.15)	\$ (15.87)	\$ (6.35)	\$ (37.44)
Weighted average number of common shares outstanding basic and diluted	1,123,045	1,151,282	1,152,839	1,154,407	1,145,500

<b>Year ended December 31, 2009</b>	<b>First Quarter</b>	<b>Second Quarter</b>	<b>Third Quarter</b>	<b>Fourth Quarter</b>	<b>Total</b>
Revenues	\$ 158,000	\$ 189,000	\$ 204,000	\$ 109,000	\$ 660,000
Gross margin	158,000	189,000	204,000	109,000	660,000
Loss from operations	(3,229,000)	(3,472,000)	(5,173,000)	(6,695,000)	(18,569,000)
Net loss	(3,917,000)	(3,522,000)	(5,386,000)	(7,060,000)	(19,885,000)
Net loss attributable to Gevo, Inc. common stockholders	(3,917,000)	(3,522,000)	(5,386,000)	(7,060,000)	(19,885,000)
Net loss per share	\$ (3.60)	\$ (3.21)	\$ (4.88)	\$ (6.34)	\$ (18.07)
Weighted-average number of common shares outstanding basic and diluted	1,087,674	1,095,878	1,104,549	1,112,751	1,100,294

**20. Subsequent Events**

**Initial Public Offering** On February 14, 2011, the Company completed its initial public offering issuing 8,222,500 shares of common stock at an offering price of \$15.00 per share, resulting in net proceeds, after deducting underwriting discounts and commissions but before expenses, to the Company of approximately \$114.7 million. Additionally, the Company incurred estimated offering costs of \$4.3 million related to the initial public offering. Upon the closing of the initial public offering, the Company's outstanding shares of convertible preferred stock were automatically converted into 16,329,703 shares of common stock and the outstanding convertible preferred stock warrants were automatically converted into common stock warrants to purchase a total of 398,032 shares of common stock.

In connection with the closing of the initial public offering, on February 11, 2011 the Company amended and restated its certificate of incorporation to increase its authorized number of shares of common stock to 100,000,000 and to authorize the issuance of 5,000,000 shares of preferred stock.

**Exclusive Supply Agreement with LANXESS** On January 14, 2011, the Company entered into an exclusive supply agreement with LANXESS Inc. (LANXESS) pursuant to which LANXESS has granted the Company an exclusive first right to supply LANXESS and its affiliates with certain of their requirements for biobased isobutanol during the term of the agreement. The Company's exclusive first right to supply biobased isobutanol to LANXESS and its affiliates will be subject to the terms of a supply agreement to be mutually agreed upon by the parties at a later date. Additionally, pursuant to the terms of the exclusive supply agreement the Company has granted LANXESS, subject to certain exceptions and conditions, (i) an exclusive first right to acquire its

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biobased isobutanol to produce isobutylene and butenes for use and sale in the field of chemicals, (ii) an exclusive right to use our isobutanol to produce butadiene and isobutylene for use in the production of polybutadiene and butyl rubber, and (iii) an exclusive right to use its isobutanol to produce isobutylene for use in the production of polyisobutylene. The initial term of the mutual exclusivity is ten years, subject to mutual extension.

**Legal Matters** On January 14, 2011, Butamax Advanced Biofuels LLC ( Butamax ), a joint venture between BP p.l.c. and E. I. du Pont de Nemours and Company, filed a complaint in the United States District Court for the District of Delaware, as Case No. 1:11-cv-00054-UNA, alleging that the Company is infringing one or more claims made in US Patent No. 7,851,188, entitled Fermentive production of four carbon alcohols. This 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. The Company believes that Butamax s claims are without merit and that the Company does not infringe any claims made in US Patent No. 7,851,188. The Company intends to contest Butamax s allegations of infringement and defend this matter vigorously. On March 25, 2011, the Company filed its response to the complaint, denying Butamax s allegations of infringement and raising affirmative defenses. Due to the very early stage of this lawsuit, the Company has determined that the possible loss or range of loss related to this lawsuit cannot be reasonably estimated at this time.

**2010 Stock Incentive Plan and Employee Stock Purchase Plan** In February 2011, the Company s stockholders approved the Gevo, Inc. 2010 Stock Incentive Plan (the 2010 Plan ) and the Gevo, Inc. Employee Stock Purchase Plan. The Company initially reserved 2,571,286 shares of common stock for issuance under the 2010 Plan and 1,285,643 shares of common stock for issuance under the Gevo, Inc. Employee Stock Purchase Plan.

**Warrant Exercise** In March 2011, Lighthouse completed a cashless net issue exercise of the warrants that had been issued to them. Lighthouse held a total of 169,247 common stock warrants on the exercise date with a weighted-average exercise price of \$5.38 per share. The cashless net issue exercise of the warrants resulted in the Company issuing 122,424 shares of its common stock to Lighthouse.

\* \* \* \* \*

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

None.

**Item 9A. Controls and Procedures**

**Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act that are designed to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required financial disclosures.

As of the end of the period covered by this Report, we conducted an evaluation, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Exchange Act Rules 13a-15(b) and 15d-15(b). Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of December 31, 2010.

**Management's Report on Internal Control over Financial Reporting**

This Report does not include a report of management's assessment regarding internal control over financial reporting due to a transition period established by rules of the SEC for newly public companies. Section 404 of the Sarbanes-Oxley Act of 2002 will require us to evaluate and report on our internal control over financial reporting beginning with our Annual Report on Form 10-K for the year ending December 31, 2011. We are in the process of performing the system and process documentation, evaluation and testing required for management to make this assessment and, for our independent auditors to provide an attestation on the effectiveness of our internal controls over financial reporting at such time as we become an accelerated filer. We have not completed this process or its assessment, and this process will require significant amounts of management time and resources. In the course of evaluation and testing, management may identify deficiencies that will need to be addressed and remediated.

**Changes in Internal Control over Financial Reporting**

There have been no changes in our internal control over financial reporting during the fiscal year ended December 31, 2010 that have or are reasonably likely to materially affect our internal control over financial reporting identified in connection with the previously mentioned evaluation.

**Item 9B. Other Information.**

None.



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**PART III**

**Item 10. Directors, Executive Officers and Corporate Governance**

The information required by this item will be included in the definitive proxy statement for our 2011 annual meeting of stockholders or an amendment to this Report to be filed with the SEC within 120 days after our fiscal year ended December 31, 2010, and is incorporated into this Report by reference.

**Item 11. Executive Compensation**

The information required by this item will be included in the definitive proxy statement for our 2011 annual meeting of stockholders or an amendment to this Report to be filed with the SEC within 120 days after our fiscal year ended December 31, 2010, and is incorporated into this Report by reference.

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

The information required by this item will be included in the definitive proxy statement for our 2011 annual meeting of stockholders or an amendment to this Report to be filed with the SEC within 120 days after our fiscal year ended December 31, 2010, and is incorporated into this Report by reference.

**Item 13. Certain Relationships and Related Transactions, and Director Independence**

The information required by this item will be included in the definitive proxy statement for our 2011 annual meeting of stockholders or an amendment to this Report to be filed with the SEC within 120 days after our fiscal year ended December 31, 2010, and is incorporated into this Report by reference.

**Item 14. Principal Accountant Fees and Services**

The information required by this item will be included in the definitive proxy statement for our 2011 annual meeting of stockholders or an amendment to this Report to be filed with the SEC within 120 days after our fiscal year ended December 31, 2010, and is incorporated into this Report by reference.

**PART IV**

**Item 15. Exhibits and Financial Statement Schedules**

***(a)(1) Financial Statements***

The following consolidated financial statements are included:

<u>Report of Independent Registered Public Accounting Firm</u>	<b>Page</b> 80
<u>Consolidated Balance Sheets December 31, 2009 and 2010</u>	81
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<b>Table of Contents</b>	<b>153</b>

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Consolidated Statements of Operations For the years ended December 31, 2008, 2009 and 2010, and for the period from June 9, 2005 (date of inception) to December 31, 201

Consolidated Statements of Stockholders Equity For the years ended December 31, 2008, 2009 and 2010, and for the period from June 9, 2005 (date of inception) to December 31, 2010

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Consolidated Statements of Cash Flows For the years ended December 31, 2008, 2009 and 2010, and for the period from June 9, 2005 (date of inception) to December 31, 2010

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Notes to Consolidated Financial Statements

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All financial statement schedules have been omitted because they are not applicable or are not required, or because the information required to be set forth therein is included in the consolidated financial statements or notes thereto.

**(a)(3) Exhibits**

Exhibit Number	Description	Previously Filed			Exhibit	Filed Herewith
		Form	File No.	Filing Date		
2.1 *	Acquisition Agreement, by and among Gevo Development, LLC, Agri-Energy, LLC, Agri-Energy Limited Partnership, CORN-er Stone Ethanol Management, Inc. and CORN-er Stone Farmers Cooperative, dated August 5, 2010.	S-1	333-168792	November 4, 2010	2.1	
2.2*	Equity Purchase Agreement, by and among Gevo, Inc., CDP Gevo, LLC, Gevo Development, LLC, Michael A. Slaney and David N. Black, dated August 5, 2010.	S-1	333-168792	October 1, 2010	2.2	
3.1	Amended and Restated Certificate of Incorporation of Gevo, Inc.					X
3.2	Amended and Restated Bylaws of Gevo, Inc.					X
4.1	Form of the Gevo, Inc. Common Stock Certificate.	S-1	333-168792	January 19, 2011	4.1	
4.2	Fifth Amended and Restated Investors Rights Agreement, dated March 26, 2010.	S-1	333-168792	August 12, 2010	4.2	
4.3	Stock Issuance and Stockholder s Rights Agreement, by and between Gevo, Inc. and California Institute of Technology, dated July 12, 2005.	S-1	333-168792	August 12, 2010	4.3	
4.4	Amended and Restated Warrant to purchase shares of Common Stock issued to CDP Gevo, LLC, dated September 22, 2010.	S-1	333-168792	October 1, 2010	4.4	
4.5	Warrant to purchase shares of Series A-3 Preferred Stock issued to Lighthouse Capital Partners V, L.P., dated December 18, 2006, as amended.	S-1	333-168792	August 12, 2010	4.5	
4.6	Warrant to purchase shares of Series A-4 Preferred Stock issued to Lighthouse Capital Partners V, L.P., dated April 30, 2007.	S-1	333-168792	August 12, 2010	4.6	

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Exhibit Number	Description	Form	Previously Filed			Filed Herewith
			File No.	Filing Date	Exhibit	
4.7	Warrant to purchase shares of Series C Preferred Stock issued to Lighthouse Capital Partners V, L.P., dated April 5, 2008.	S-1	333-168792	August 12, 2010	4.7	
4.8	Warrant to purchase shares of Series C Preferred Stock issued to Lighthouse Capital Partners V, L.P., dated August 12, 2008.	S-1	333-168792	August 12, 2010	4.8	
4.9	Warrant to purchase shares of Preferred Stock, issued to Virgin Green Fund I, L.P., dated January 18, 2008.	S-1	333-168792	August 12, 2010	4.10	
4.10	Warrant to purchase shares of Series D Preferred Stock issued to Lighthouse Capital Partners V, L.P., dated July 20, 2009.	S-1	333-168792	August 12, 2010	4.11	
4.11	Plain English Warrant Agreement No. 0647-W-01, by and between Gevo, Inc. and TriplePoint Capital LLC, dated August 5, 2010.	S-1	333-168792	October 1, 2010	4.11	
4.12	Plain English Warrant Agreement No. 0647-W-02, by and between Gevo, Inc. and TriplePoint Capital LLC, dated August 5, 2010.	S-1	333-168792	October 1, 2010	4.12	
10.1	Loan and Security Agreement, by and between Gevo, Inc. and Lighthouse Capital Partners V, L.P., dated December 18, 2006, as amended.	S-1	333-168792	August 12, 2010	10.1	
10.2	Plain English Growth Capital Loan and Security Agreement, by and between Gevo, Inc. and TriplePoint Capital LLC, dated August 5, 2010.	S-1	333-168792	October 21, 2010	10.23	
10.3	Plain English Growth Capital Loan and Security Agreement, by and between Gevo Development, LLC and TriplePoint Capital, LLC, dated August 5, 2010.	S-1	333-168792	October 21, 2010	10.24	

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<b>Exhibit Number</b>	<b>Description</b>	<b>Previously Filed</b>			<b>Exhibit</b>	<b>Filed Herewith</b>
		<b>Form</b>	<b>File No.</b>	<b>Filing Date</b>		
10.4	Joinder Agreement and First Amendment, by and among Gevo Development, LLC, Agri-Energy, LLC and TriplePoint Capital, LLC, dated September 22, 2010, to the Plain English Growth Capital Loan and Security Agreement, by and between Gevo Development, LLC and TriplePoint Capital, LLC, dated August 5, 2010.	S-1	333-168792	October 21, 2010	10.25	
10.5	Commercialization Agreement, by and between Gevo, Inc. and ICM, Inc., dated October 16, 2008.	S-1	333-168792	August 12, 2010	10.2	
10.6	Development Agreement, by and between Gevo, Inc. and ICM, Inc., dated October 16, 2008.	S-1	333-168792	November 4, 2010	10.3	
10.7	Amendment No. 1, effective July 1, 2010, to the Development Agreement, by and between Gevo, Inc. and ICM, Inc., dated October 16, 2008.	S-1	333-168792	October 1, 2010	10.25	
10.8	Ethanol Purchasing and Marketing Agreement, by and between C&N Ethanol Marketing Corporation and Agri-Energy Limited Partnership, dated April 1, 2009.	S-1	333-168792	November 4, 2010	10.26	
10.9	Exclusive Supply Agreement, by and among Gevo, Inc., LANXESS Inc. and LANXESS Corporation, dated January 14, 2011.	S-1	333-168792	January 19, 2011	10.32	
10.10	License Agreement, by and between Gevo, Inc. and Cargill Incorporated, effective February 19, 2009.	S-1	333-168792	August 12, 2010	10.4	
10.11	Exclusive License Agreement, by and between Gevo, Inc. and The Regents of the University of California, dated September 6, 2007, as amended.	S-1	333-168792	August 12, 2010	10.5	
10.12	License Agreement, by and between Gevo, Inc. and the California Institute of Technology, dated July 12, 2005, as amended.	S-1	333-168792	November 4, 2010	10.6	
10.13	Amendment No. 4, dated October 1, 2010, to the License Agreement, by and between Gevo, Inc. and the California Institute of Technology, dated July 12, 2005.	S-1	333-168792	October 21, 2010	10.10	

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Exhibit Number	Description	Previously Filed			Exhibit	Filed Herewith
		Form	File No.	Filing Date		
10.14	Sublease, by and between Gevo, Inc. and Luzenac America, Inc., dated November 28, 2007.	S-1	333-168792	November 4, 2010	10.7	
10.15	First Amended and Restated Limited Liability Company Agreement of Gevo Development, LLC, dated August 5, 2010.	S-1	333-168792	November 4, 2010	10.8	
10.16#	2006 Omnibus Securities and Incentive Plan.	S-1	333-168792	August 12, 2010	10.11	
10.17#	Form of Restricted Stock Award Agreement under the 2006 Omnibus Securities and Incentive Plan.	S-1	333-168792	August 12, 2010	10.12	
10.18#	Form of Stock Option Agreement under the 2006 Omnibus Securities and Incentive Plan.	S-1	333-168792	August 12, 2010	10.13	
10.19#	2010 Stock Incentive Plan.					X
10.20#	Form of Restricted Stock Unit Agreement under the 2010 Stock Incentive Plan.	S-1	333-168792	January 19, 2011	10.15	
10.21#	Form of Restricted Stock Award Agreement under the 2010 Stock Incentive Plan.					X
10.22#	Form of Stock Option Award Agreement under the 2010 Stock Incentive Plan.					X
10.23#	Employee Stock Purchase Plan.	S-8	333-172771	March 11, 2011	4.7	
10.24#	Employment Agreement, by and between Gevo, Inc. and Patrick Gruber, dated June 4, 2010.	S-1	333-168792	November 4, 2010	10.14	
10.25#	Employment Agreement, by and between Gevo, Inc. and Mark Smith, dated June 4, 2010.	S-1	333-168792	November 4, 2010	10.15	
10.26#	Employment Agreement, by and between Gevo, Inc. and Christopher Ryan, dated June 4, 2010.	S-1	333-168792	November 4, 2010	10.16	
10.27#	Employment Agreement, by and between Gevo, Inc. and David Glassner, dated June 4, 2010.	S-1	333-168792	November 4, 2010	10.17	
10.28#	Employment Agreement, by and between Gevo, Inc. and Brett Lund, dated June 4, 2010.	S-1	333-168792	November 4, 2010	10.18	
10.29#	Employment Agreement, by and between Gevo, Inc. and Jack Huttner, dated August 10, 2010.	S-1	333-168792	November 4, 2010	10.19	

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Exhibit Number	Description	Previously Filed			Exhibit	Filed Herewith
		Form	File No.	Filing Date		
10.30#	Employment Agreement, by and between Gevo, Inc. and David N. Black, dated September 22, 2010.	S-1	333-168792	January 19, 2011	10.23	
10.31#	Employment Agreement, by and between Gevo, Inc. and Michael A. Slaney, dated September 22, 2010.	S-1	333-168792	January 19, 2011	10.24	
10.32#	Offer Letter, by and between Gevo, Inc. and Stacy Smith, dated June 7, 2010.	S-1	333-168792	November 4, 2010	10.20	
10.33#	Offer Letter, by and between Gevo, Inc. and Bruce Smith, dated June 14, 2010.	S-1	333-168792	November 4, 2010	10.21	
10.34#	Offer Letter, by and between Gevo, Inc. and Carlos A. Cabrera, dated June 14, 2010.	S-1	333-168792	November 4, 2010	10.22	
10.35#	Form of Indemnification Agreement between Gevo, Inc. and its directors and officers.	S-1	333-168792	January 19, 2011	10.33	
21.1	List of Subsidiaries.	S-1	333-168792	October 1, 2010	10.10	
23.1	Consent of Deloitte & Touche, LLP.					X
24.1	Power of Attorney (see the signature page to this Report).					X
31.1	Section 302 Certification of the Principal Executive Officer.					X
31.2	Section 302 Certification of the Principal Financial Officer.					X
32.1	Section 906 Certification of the Chief Executive Officer and Chief Financial Officer.					X

\* Certain schedules and exhibits referenced in this document have been omitted in accordance with Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished supplementally to the SEC upon request.

Certain portions have been omitted pursuant to a confidential treatment request. Omitted information has been filed separately with the SEC.

# Indicates a management contract or compensatory plan or arrangement required to be filed as an exhibit to this Report.

**(b) Exhibits**

See Item 15(a)(3) above.

**(c) Financial Statement Schedules**

See Item 15(a)(2) above.

**Table of Contents****SIGNATURES**

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

GEVO, INC.

By: */s/* MARK SMITH  
Mark Smith

*Chief Financial Officer*

Date: March 28, 2011

**POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Patrick R. Gruber and Mark Smith, jointly and severally, as his or her attorney-in-fact, each with full power of substitution, for him or her, in any and all capacities, to sign each amendment to this report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact or his or her substitute or substitutes may lawfully do or cause to be done by virtue hereof.

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

<b>Signatures</b>	<b>Title</b>	<b>Date</b>
<i>/s/</i> PATRICK R. GRUBER  Patrick R. Gruber, Ph.D.	Chief Executive Officer (Principal Executive Officer) and Director	March 28, 2011
<i>/s/</i> MARK SMITH  Mark Smith	Chief Financial Officer (Principal Financial and Accounting Officer)	March 28, 2011
<i>/s/</i> SHAI WEISS  Shai Weiss	Chairman of the Board of Directors	March 28, 2011
<i>/s/</i> GANESH M. KISHORE  Ganesh M. Kishore, Ph.D.	Director	March 28, 2011
<i>/s/</i> VÉRONIQUE HERVOUET.  Véronique Hervouet	Director	March 28, 2011
<i>/s/</i> STACY J. SMITH  Stacy J. Smith	Director	March 28, 2011



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/s/ RON COMMANDER	Director	March 28, 2011
<b>Ron Commander, Ph.D.</b>		
/s/ BRUCE A. SMITH	Director	March 28, 2011
<b>Bruce A. Smith</b>		
/s/ CARLOS A. CABRERA	Director	March 28, 2011
<b>Carlos A. Cabrera</b>		