

**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)

(303) 858-8358

(Registrant's telephone number, including area code)

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

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
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 Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

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

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.
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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 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.

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®, or GIFT®, an integrated technology platform for the efficient production and separation of isobutanol. GIFT® 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® 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.

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 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 Airline’s 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

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

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® 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® 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® 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® 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 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's® 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's® 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.

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.

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

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.

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.

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.

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.

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.

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
	<u>\$ 7,376,000</u>	<u>\$ 10,508,000</u>	<u>\$ 14,820,000</u>

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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. Such filings are placed on our website as soon as reasonably practical after they are filed with the SEC. Any information contained in, or that can be accessed through our website, is not incorporated by reference into, nor is it in any way part of, this Report.

Item 1A. Risk Factors

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

Certain Risks Relating to our Business and Strategy

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

We have incurred net losses since our inception, including losses of \$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.

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

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
- 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.

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.

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

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 Verenum 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.

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;
- 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 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.]

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.

Item 6. Selected Financial Data

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

We derived the consolidated statements of operations data for 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)
Net loss per share of common stock attributable to Gevo, Inc. stockholders, basic and diluted	\$ (1.17)	\$ (7.40)	\$ (13.83)	\$ (18.07)	\$ (37.44)
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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<u>Consolidated balance sheet data:</u>	<u>As of December 31,</u>				
	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010(1)</u>
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.

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:

<u>Date of issuance</u>	<u>Number of options</u>	<u>Exercise price per share</u>	<u>Fair value</u>	<u>Intrinsic value</u>
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:

<u>Valuation date</u>	<u>Fair value per share</u>
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:

	<u>January 1, 2009</u>	<u>December 31, 2009</u>	<u>December 31, 2010</u>
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
		<u>411,249</u>	<u>303,173(2)</u>		<u>\$1,254,000</u>	<u>\$ 289,000</u>	<u>\$ 982,000</u>	<u>\$2,034,000</u>

- (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.

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	<u>(13,519,000)</u>	<u>(19,229,000)</u>	<u>5,710,000</u>	42%
Loss from operations	<u>(13,311,000)</u>	<u>(18,569,000)</u>	<u>5,258,000</u>	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	<u>(1,231,000)</u>	<u>(1,316,000)</u>	<u>85,000</u>	7%
Net loss attributable to Gevo, Inc. common stockholders	<u>\$ (14,542,000)</u>	<u>\$ (19,885,000)</u>	<u>\$ 5,343,000</u>	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

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:

	Total	2011	2012	2013	2014	2015 and Thereafter
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	—	—	—
Total	<u>\$ 30,437,000</u>	<u>\$ 5,227,000</u>	<u>\$ 6,254,000</u>	<u>\$ 10,293,000</u>	<u>\$ 8,663,000</u>	<u>\$ —</u>

- (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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Item 8. Financial Statements and Supplementary Data

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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

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CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2009 AND 2010

	December 31, 2009	December 31, 2010
ASSETS		
CURRENT ASSETS:		
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
TOTAL	\$ 26,383,000	\$ 51,609,000
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
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
Total liabilities	11,300,000	31,650,000
COMMITMENTS AND CONTINGENCIES (Notes 17 and 20)		
STOCKHOLDERS' EQUITY		
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)
Total stockholders' equity	15,083,000	19,959,000
TOTAL	\$ 26,383,000	\$ 51,609,000

* 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

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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
REVENUES:				
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
Total revenues	<u>208,000</u>	<u>660,000</u>	<u>16,396,000</u>	<u>17,639,000</u>
COST OF GOODS SOLD	<u>—</u>	<u>—</u>	<u>(13,446,000)</u>	<u>(13,446,000)</u>
GROSS MARGIN	<u>208,000</u>	<u>660,000</u>	<u>2,950,000</u>	<u>4,193,000</u>
OPERATING EXPENSES:				
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)
Total operating expenses	<u>(13,519,000)</u>	<u>(19,229,000)</u>	<u>(38,463,000)</u>	<u>(80,138,000)</u>
LOSS FROM OPERATIONS	<u>(13,311,000)</u>	<u>(18,569,000)</u>	<u>(35,513,000)</u>	<u>(75,945,000)</u>
OTHER (EXPENSE) INCOME:				
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)
Other expense—net	<u>(1,231,000)</u>	<u>(1,316,000)</u>	<u>(4,599,000)</u>	<u>(7,189,000)</u>
NET LOSS	<u>(14,542,000)</u>	<u>(19,885,000)</u>	<u>(40,112,000)</u>	<u>(83,134,000)</u>
Deemed dividend—amortization of beneficial conversion feature on Series D-1 convertible preferred stock	—	—	(2,778,000)	(2,778,000)
NET LOSS ATTRIBUTABLE TO GEVO, INC. COMMON STOCKHOLDERS	<u>\$ (14,542,000)</u>	<u>\$ (19,885,000)</u>	<u>\$ (42,890,000)</u>	<u>\$ (85,912,000)</u>
Net loss per share attributable to Gevo, Inc. common stockholders—basic and diluted	<u>\$ (13.83)</u>	<u>\$ (18.07)</u>	<u>\$ (37.44)</u>	
Weighted-average number of common shares outstanding—basic and diluted	<u>1,051,848</u>	<u>1,100,294</u>	<u>1,145,500</u>	

See notes to consolidated financial statements

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Deficit Accumulated During the Development Stage	Total Stockholders' Equity
	Shares	Amount	Shares	Amount			
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 notes	—	—	—	—	505,000	—	505,000
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)

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

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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
CASH FLOWS FROM OPERATING ACTIVITIES:				
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	<u>(11,741,000)</u>	<u>(16,099,000)</u>	<u>(20,896,000)</u>	<u>(55,757,000)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:				
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	<u>(2,315,000)</u>	<u>(2,942,000)</u>	<u>(25,702,000)</u>	<u>(33,290,000)</u>

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
CASH FLOWS FROM FINANCING ACTIVITIES:				
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	<u>23,628,000</u>	<u>30,646,000</u>	<u>40,632,000</u>	<u>104,321,000</u>
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	9,572,000	11,605,000	(5,966,000)	15,274,000
CASH AND CASH EQUIVALENTS:				
Beginning of period	63,000	9,635,000	21,240,000	—
Ending of period	<u>\$ 9,635,000</u>	<u>\$ 21,240,000</u>	<u>\$ 15,274,000</u>	<u>\$ 15,274,000</u>
SUPPLEMENTAL DISCLOSURES OF NONCASH TRANSACTIONS—Investing and financing:				
Warrants issued with secured long-term debt	<u>\$ 326,000</u>	<u>\$ 203,000</u>	<u>\$ 177,000</u>	<u>\$ 749,000</u>
Warrants issued with convertible promissory notes	<u>\$ 505,000</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 505,000</u>
Promissory notes and accrued interest converted to Series C preferred stock	<u>\$ 3,043,000</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 3,043,000</u>
Issuance of common stock pursuant to license agreements	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 10,000</u>
Issuance of Series C preferred stock upon exercise of warrant (amount reclassified from liability to equity)	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,458,000</u>	<u>\$ 1,458,000</u>
Issuance of Series D-1 preferred stock to ICM, Inc. in exchange for a credit against future services	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,000,000</u>	<u>\$ 1,000,000</u>

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

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.

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) 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.

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:

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

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):

	Year Ended December 31, 2009	Year Ended December 31, 2010
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.

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3. Property, Plant and Equipment

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

	Estimated Useful Lives	December 31, 2009	December 31, 2010
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		<u>\$ 4,632,000</u>	<u>\$23,465,000</u>

- (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:

	December 31, 2010
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	<u>\$ 3,765,000</u>

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.

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	<u>\$ 30,000</u>	<u>\$1,365,000</u>	<u>\$2,349,000</u>	<u>\$3,744,000</u>

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:

	<u>December 31,</u> <u>2009</u>	<u>December 31,</u> <u>2010</u>
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	<u>(688,000)</u>	<u>(1,606,000)</u>
	7,701,000	20,432,000
Less current portion	—	<u>(1,785,000)</u>
Long-term portion of the long-term debt	<u>\$ 7,701,000</u>	<u>\$ 18,647,000</u>

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:

	<u>Principal</u>	<u>Final Payment</u>	<u>Total</u>
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
	<u>\$ 20,434,000</u>	<u>\$ 1,604,000</u>	<u>\$ 22,038,000</u>

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
	<u>\$ 2,521,000</u>	<u>\$ 7,903,000</u>

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:

	<u>Shares Authorized</u>	<u>Shares Outstanding</u>	<u>Liquidation Preference</u>
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
	<u>15,246,000</u>	<u>14,613,602</u>	<u>\$ 90,660,000</u>

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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
		<u>411,249</u>	<u>303,173(2)</u>		<u>\$1,254,000</u>	<u>\$ 289,000</u>	<u>\$ 982,000</u>	<u>\$2,034,000</u>

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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:

	<u>December 31, 2010</u>
Balance Sheet Line Item	
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.

	<u>Year Ended December 31, 2010</u>
Statement of Operations Location	
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.

<u>Year of Expiration</u>	<u>December 31, 2010 Corn Net Long (Short) Position Bushels</u>
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:

	<u>Number of Options</u>	<u>Weighted- Average Exercise Price</u>	<u>Weighted- Average Remaining Contractual Term (years)</u>	<u>Aggregate Intrinsic Value</u>
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:

	<u>Years Ended December 31,</u>			<u>Cumulative Amounts From June 9, 2005 (Date of Inception) To December 31, 2010</u>
	<u>2008</u>	<u>2009</u>	<u>2010</u>	
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
Total stock-based compensation	<u>\$ 207,000</u>	<u>\$ 945,000</u>	<u>\$ 11,285,000</u>	<u>\$ 12,494,000</u>

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)
Nonvested—December 31, 2008	<u>86,971</u>	\$ 0.42
Granted	—	—
Vested	(37,634)	(0.41)
Canceled or forfeited	(13,530)	(0.35)
Nonvested—December 31, 2009	<u>35,807</u>	\$ 0.45
Granted	—	—
Vested	(7,812)	(0.49)
Canceled or forfeited	(22,266)	(0.43)
Nonvested—December 31, 2010	<u>5,729</u>	\$ 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.

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.

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As of December 31, 2010, future minimum lease payments required under the Company's operating leases for the Colorado facility and corporate apartment are as follows:

<u>Years Ending December 31</u>	
2011	\$ 499,000
2012	497,000
2013	292,000
2014	—
2015	—
	<u>\$ 1,288,000</u>

Guarantees and Indemnifications—In the ordinary course of its business, the Company makes certain indemnities, commitments, and guarantees under which it may be required to make payments in relation to certain transactions. The Company, as permitted under Delaware law and in accordance with its amended and restated certificate of incorporation and amended and restated bylaws, indemnifies its officers and directors for certain events or occurrences, subject to certain limits, while the officer or director is or was serving at the Company's request in such capacity. The duration of these indemnifications, commitments, and guarantees varies and, in certain cases, is indefinite. The maximum amount of potential future indemnification is unlimited; however, the Company has a director and officer insurance policy that may enable it to recover a portion of any future amounts paid. The Company believes the fair value of these indemnification agreements is minimal. The Company has not recorded any liability for these indemnities in the accompanying balance sheets. However, the Company accrues for losses for any known contingent liability, including those that may arise from indemnification provisions, when future payment is probable. No such losses have been recorded to date.

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18. Segments

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
Revenues:			
Gevo, Inc.	\$ 208,000	\$ 660,000	\$ 1,631,000
Gevo Development/Agri-Energy	—	—	14,765,000
Intercompany eliminations	—	—	—
	<u>\$ 208,000</u>	<u>\$ 660,000</u>	<u>\$ 16,396,000</u>
Operating income (loss):			
Gevo, Inc.	\$ (13,311,000)	\$ (17,838,000)	\$ (33,809,000)
Gevo Development/Agri-Energy	—	(731,000)	(1,704,000)
Intercompany eliminations	—	—	—
	<u>\$ (13,311,000)</u>	<u>\$ (18,569,000)</u>	<u>\$ (35,513,000)</u>
Interest expense:			
Gevo, Inc.	\$ 1,385,000	\$ 1,103,000	\$ 1,751,000
Gevo Development/Agri-Energy	—	—	623,000
Intercompany eliminations	—	—	—
	<u>\$ 1,385,000</u>	<u>\$ 1,103,000</u>	<u>\$ 2,374,000</u>
Depreciation Expense:			
Gevo, Inc.	\$ 678,000	\$ 1,511,000	\$ 2,639,000
Gevo Development/Agri-Energy	—	—	549,000
Intercompany eliminations	—	—	—
	<u>\$ 678,000</u>	<u>\$ 1,511,000</u>	<u>\$ 3,188,000</u>
Total assets:			
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)
	<u>\$ 13,094,000</u>	<u>\$ 26,383,000</u>	<u>\$ 51,609,000</u>
Acquisitions of plant, property and equipment:			
Gevo, Inc.	\$ 2,360,000	\$ 2,982,000	\$ 806,000
Gevo Development/Agri-Energy (1)	—	—	—
Intercompany eliminations	—	—	—
	<u>\$ 2,360,000</u>	<u>\$ 2,982,000</u>	<u>\$ 806,000</u>

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

19. Quarterly Information (Unaudited)

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:

<u>Year ended December 31, 2010</u>	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>	<u>Total</u>
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
<u>Year ended December 31, 2009</u>	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>	<u>Total</u>
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.

* * * * *

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.

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:

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Report of Independent Registered Public Accounting Firm	80
Consolidated Balance Sheets—December 31, 2009 and 2010	81
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	82
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	83
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	85
Notes to Consolidated Financial Statements	88

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(a)(2) Financial Statement Schedules

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

<u>Exhibit Number</u>	<u>Description</u>	<u>Form</u>	<u>Previously Filed</u>		<u>Exhibit</u>	<u>Filed Herewith</u>
			<u>File No.</u>	<u>Filing Date</u>		
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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<u>Exhibit Number</u>	<u>Description</u>	<u>Form</u>	<u>Previously Filed</u>		<u>Exhibit</u>	<u>Filed Herewith</u>
			<u>File No.</u>	<u>Filing Date</u>		
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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Exhibit Number	Description	Form	Previously Filed		Exhibit	Filed Herewith
			File No.	Filing Date		
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	Form	Previously Filed		Exhibit	Filed Herewith
			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	Form	Previously Filed		Exhibit	Filed Herewith
			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.

**AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION**

OF

GEVO, INC.

GEVO, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify as follows:

1. The name of the corporation is Gevo, Inc.

2. The date of filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware was June 9, 2005 under the name of Methanotech, Inc.

3. The Amended and Restated Certificate of Incorporation of this corporation is hereby amended and restated to read as follows:

FIRST: The name of the corporation is Gevo, Inc. (hereinafter referred to as the "Corporation").

SECOND: The address of the registered office of the Corporation in the State of Delaware is 160 Greentree Drive, Suite 101, City of Dover, County of Kent, Delaware 19904. The name of the registered agent of the Corporation at that address is National Registered Agents, Inc.

THIRD: The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware (the "Delaware General Corporation Law").

FOURTH: The Corporation is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares of all classes of capital stock which the Corporation shall have authority to issue is 105,000,000, of which 100,000,000 shares shall be Common Stock, having a par value of \$0.01 per share (the "Common Stock"), and 5,000,000 shares shall be Preferred Stock, having a par value of \$0.01 per share (the "Preferred Stock").

A. The board of directors or any authorized committee thereof is authorized, to the fullest extent permitted by law, to provide for the issuance of shares of Preferred Stock in series, and by filing a certificate pursuant to the applicable law of the State of Delaware (such certificate being hereinafter referred to as a "Preferred Stock Designation"), to establish from time to time the number of shares to be included in each such series and the designation of such series, to fix the voting powers (if any) of the shares of such series, and to fix any other powers, preferences and rights of the shares of each such series and any qualifications, limitations or restrictions thereof. The powers, preferences and relative, participating, optional and other special rights of each series of Preferred Stock, and the qualifications, limitations or restrictions thereof, if any, may differ from those of any and all other series at any time outstanding. Except as otherwise provided in any Preferred Stock Designation, the number of authorized shares of Common Stock or

Preferred Stock may from time to time be increased or decreased (but not below the number of shares of such class outstanding) by the affirmative vote of a majority in voting power of the outstanding capital stock of the Corporation entitled to vote thereon, irrespective of the provisions of Section 242(b)(2) of the Delaware General Corporation Law (or any successor provision thereto), and no vote of the holders of either the Common Stock or the Preferred Stock voting separately as a class shall be required therefor.

B. Each outstanding share of Common Stock shall entitle the holder thereof to one vote on each matter properly submitted to the stockholders of the Corporation for their vote; *provided, however*, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Amended and Restated Certificate of Incorporation (including any Preferred Stock Designation) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon pursuant to this Amended and Restated Certificate of Incorporation (including any Preferred Stock Designation) or pursuant to the Delaware General Corporation Law.

FIFTH: The following provisions are inserted for the management of the business and the conduct of the affairs of the Corporation, and for further definition, limitation and regulation of the powers of the Corporation and of its directors and stockholders:

A. The business and affairs of the Corporation shall be managed by or under the direction of the board of directors.

B. The directors of the Corporation need not be elected by written ballot unless the Corporation's Bylaws so provide.

C. Subject to the rights of the holders of any series of Preferred Stock, any action required or permitted to be taken by the stockholders of the Corporation must be effected at a duly called annual or special meeting of stockholders of the Corporation and may not be effected by any consent in writing by such stockholders.

D. Special meetings of stockholders of the Corporation may be called only by the board of directors acting pursuant to a resolution adopted by a majority of the directors then in office.

E. Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, or (iv) any action asserting a claim governed by the internal affairs doctrine, in each case subject to said Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein. Any person or entity purchasing or otherwise acquiring any interest in shares of

capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article FIFTH, Section E.

SIXTH: A. Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, the number of directors shall be fixed from time to time exclusively by the board of directors pursuant to a resolution adopted by a majority of the directors then in office. The date, time and place, if any, of the annual meeting of stockholders for the purpose of electing directors shall be determined solely by resolution of the board of directors in its sole and absolute discretion. The board of directors, other than those directors who may be elected by the holders of any series of Preferred Stock under specified circumstances, shall be divided into three classes, designated as Class I, Class II and Class III, respectively. The board of directors is authorized to assign members of the board already in office to each class in accordance with a resolution or resolutions that has been or will be adopted by a majority of the directors then in office. Each class shall consist, as nearly as may be possible, of one-third of the total number of directors constituting the entire board of directors. The Class I directors shall initially serve until the Corporation's first annual meeting of stockholders held after the closing of the Corporation's initial public offering; the Class II directors shall initially serve until the Corporation's second annual meeting of stockholders held after the closing of the Corporation's initial public offering; and the Class III directors shall initially serve until the Corporation's third annual meeting of stockholders held after the closing of the Corporation's initial public offering, with each director to hold office until his or her successor shall have been duly elected and qualified. Commencing with the first annual meeting of stockholders held after the closing of the Corporation's initial public offering, directors of each class the term of which shall then expire shall be elected for a term of office ending at the third annual meeting of stockholders following such persons' election, with each director to hold office until his or her successor shall have been duly elected and qualified. In case of any increase or decrease, from time to time, in the number of directors (other than directors elected by the holders of any series of Preferred Stock), the number of directors in each class shall be apportioned as nearly equal as possible.

B. Subject to the rights of the holders of any series of Preferred Stock then outstanding, any and all vacancies in the board of directors, however occurring, including, without limitation, newly-created directorships by reason of an increase in the size of the board of directors, or the death, resignation, disqualification or removal of a director, shall, unless otherwise required by law or by resolution of the board of directors, be filled only by a majority vote of the remaining directors then in office, even if less than a quorum (and not by stockholders), and directors so chosen shall serve for a term expiring at the annual meeting of stockholders at which the term of office of the class to which they have been chosen expires or until such directors' successors shall have been duly elected and qualified. No decrease in the authorized number of directors shall shorten the term of any incumbent director. In the event of a vacancy in the board of directors, the remaining directors then in office, except as otherwise provided by law, shall exercise the powers of the full board of directors until the vacancy is filled.

C. Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the Corporation shall be given in the manner provided in the Bylaws of the Corporation.

D. Subject to the rights of the holders of any series of Preferred Stock then outstanding, any director, or the entire board of directors, may be removed from office at any time, but only for cause and only by the affirmative vote of the holders of at least a majority of the voting power of all of the then-outstanding shares of capital stock of the Corporation then entitled to vote at an election of directors, voting together as a single class.

SEVENTH: In furtherance and not in limitation of the powers conferred by law, the board of directors is expressly empowered to adopt, amend or repeal the Bylaws of the Corporation. Any adoption, amendment or repeal of the Bylaws of the Corporation by the board of directors shall require the approval of a majority of the directors then in office. The stockholders shall also have power to adopt, amend or repeal the Bylaws of the Corporation; *provided, however*, that, in addition to any vote of the holders of any class or series of stock of the Corporation required by law or by this Amended and Restated Certificate of Incorporation, the affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of all of the then-outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to adopt, amend or repeal any provision of the Bylaws of the Corporation.

EIGHTH: A director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability: (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders; (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (iii) under Section 174 of the Delaware General Corporation Law; or (iv) for any transaction from which the director derived an improper personal benefit. If the Delaware General Corporation Law is amended after the effective date of this Amended and Restated Certificate of Incorporation to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

Neither any amendment nor repeal nor modification of this Article EIGHTH, nor the adoption of any provision of this Amended and Restated Certificate of Incorporation inconsistent with this Article EIGHTH, shall eliminate, reduce or otherwise adversely affect any limitation on the personal liability of a director of the Corporation existing at the time of such amendment, repeal, modification or adoption of such an inconsistent provision with respect to events occurring prior to the date of such amendment, repeal, modification or adoption.

NINTH: The Corporation reserves the right to amend or repeal any provision contained in this Amended and Restated Certificate of Incorporation in the manner prescribed by the laws of the State of Delaware and all rights conferred upon stockholders are granted subject to this reservation; *provided, however*, that, notwithstanding any other provision of this Amended and Restated Certificate of Incorporation or any provision of law that might otherwise permit a lesser vote or no vote, but in addition to any vote of the holders of any class or series of the stock of this Corporation required by law or by this Amended and Restated Certificate of Incorporation, the affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting

power of all of the then-outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend or repeal this Article NINTH, Sections C, D or E of Article FIFTH, Article SIXTH, Article SEVENTH, or Article EIGHTH.

4. This Amended and Restated Certificate of Incorporation has been duly adopted in accordance with the provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware by the board of directors and the stockholders of the Corporation.

IN WITNESS WHEREOF, said Corporation has caused this Amended and Restated Certificate of Incorporation to be signed by its duly authorized officer and the foregoing facts stated herein are true and correct.

Dated: February 11, 2011

Gevo, Inc.

By: /s/ Patrick Gruber
Patrick Gruber, CEO

GEVO, INC.

AMENDED AND RESTATED BYLAWS

ARTICLE I - STOCKHOLDERSSection 1. Annual Meeting.

An annual meeting of the stockholders of Gevo, Inc. (the “**Corporation**”), for the election of directors to succeed those whose terms expire and for the transaction of such other business as may properly come before the meeting in accordance with Section 2 of this Article I, shall be held at such place, on such date, and at such time as the Board of Directors of the Corporation (the “**Board**”) shall each year fix, which date shall be within thirteen (13) months of the last annual meeting of stockholders. The Board may, in its sole discretion, determine that a meeting of stockholders shall not be held at any place, but may instead be held solely by means of remote communication, as authorized by Section 211(a)(2) of the General Corporation Law of the State of Delaware (the “**DGCL**”).

Section 2. Advance Notice Provisions for Stockholder Proposals.

(1) At an annual meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. To be properly brought before an annual meeting, business must be (i) brought before the meeting by the Corporation and specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board, (ii) brought before the meeting by or at the direction of the Board or any committee thereof, or (iii) otherwise properly brought before the meeting by a stockholder who (A) was a stockholder of record of the Corporation (and, with respect to any beneficial owner, if different, on whose behalf such business is proposed, only if such beneficial owner was the beneficial owner of shares of the Corporation) both at the time of giving the notice provided for in this Section 2 and at the time of the meeting, (B) is entitled to vote at the meeting, and (C) has complied with this Section 2 as to such business. Stockholders shall not be permitted to propose business to be brought before a special meeting of the stockholders, and the only matters that may be brought before a special meeting are the matters specified in the notice of meeting given by or at the direction of the Board pursuant to Section 4 of this Article I. Stockholders seeking to nominate persons for election to the Board must comply with Section 3 of this Article I, and this Section 2 shall not be applicable to nominations except as expressly provided in Section 3 of this Article I.

(2) Without qualification, for business to be properly brought before an annual meeting by a stockholder, the stockholder must (i) provide Timely Notice (as defined below) thereof in writing and in proper form to the Secretary of the Corporation, (ii) provide any updates or supplements to such notice at the times and in the forms required by this Section 2 and (iii) constitute a proper matter for stockholder action. To be timely, a stockholder’s notice must be delivered to, or mailed and received at, the principal executive offices of the Corporation not later than the close of business on the ninetieth (90th) day nor earlier than the one hundred twentieth (120th) day prior to the one (1)-year anniversary of the preceding year’s annual

meeting; provided, however, that if the date of the annual meeting is more than thirty (30) days before or more than seventy (70) days after such anniversary date, notice by the stockholder to be timely must be so delivered, or mailed and received, not earlier than the close of business on the one hundred twentieth (120th) day prior to such annual meeting and not later than the close of business on the ninetieth (90th) day prior to such annual meeting or, if later, the tenth (10th) day following the day on which public disclosure of the date of such annual meeting was first made (such notice within such time periods, "**Timely Notice**"). In no event shall any adjournment or postponement of an annual meeting or the announcement thereof commence a new time period (or extend any time period) for the giving of Timely Notice as described above.

(3) To be in proper form for purposes of this Section 2, a stockholder's notice to the Secretary of the Corporation shall set forth:

(i) As to each Proposing Person (as defined below), (A) the name and address of such Proposing Person (including, if applicable, the name and address that appear on the Corporation's books and records); and (B) the class or series and number of shares of the Corporation that are, directly or indirectly, owned of record or beneficially owned (within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (as so amended and inclusive of such rules and regulations, the "**Exchange Act**")) by such Proposing Person, except that such Proposing Person shall in all events be deemed to beneficially own any shares of any class or series of the Corporation as to which such Proposing Person has a right to acquire beneficial ownership at any time in the future (the disclosures to be made pursuant to the foregoing clauses (A) and (B) are referred to as "**Stockholder Information**");

(ii) As to each Proposing Person, (A) any derivative, swap or other transaction or series of transactions engaged in, directly or indirectly, by such Proposing Person, the purpose or effect of which is to give such Proposing Person economic risk similar to ownership of shares of any class or series of the Corporation, including due to the fact that the value of such derivative, swap or other transactions are determined by reference to the price, value or volatility of any shares of any class or series of the Corporation, or which derivative, swap or other transactions provide, directly or indirectly, the opportunity to profit from any increase in the price or value of shares of any class or series of the Corporation ("**Synthetic Equity Interests**"), which Synthetic Equity Interests shall be disclosed without regard to whether (x) the derivative, swap or other transactions convey any voting rights in such shares to such Proposing Person, (y) the derivative, swap or other transactions are required to be, or are capable of being, settled through delivery of such shares or (z) such Proposing Person may have entered into other transactions that hedge or mitigate the economic effect of such derivative, swap or other transactions, (B) any proxy (other than a revocable proxy or consent given in response to a solicitation made pursuant to, and in accordance with, Section 14(a) of the Exchange Act by way of a solicitation statement filed on Schedule 14A), agreement, arrangement, understanding or relationship pursuant to which such Proposing Person has or shares a right to vote any shares of any class or series of the Corporation, (C) any agreement, arrangement, understanding or relationship, including any repurchase or similar so-called "stock borrowing" agreement or arrangement, engaged in, directly or indirectly, by such Proposing Person, the purpose or effect of which is to mitigate loss to, reduce the economic risk (of ownership or otherwise) of shares of any class or series of the Corporation by, manage the risk of share price changes for, or increase

or decrease the voting power of, such Proposing Person with respect to the shares of any class or series of the Corporation, or which provides, directly or indirectly, the opportunity to profit from any decrease in the price or value of the shares of any class or series of the Corporation ("**Short Interests**"), (D) any rights to dividends on the shares of any class or series of the Corporation owned beneficially by such Proposing Person that are separated or separable from the underlying shares of the Corporation, (E) any performance related fees (other than an asset based fee) that such Proposing Person is entitled to based on any increase or decrease in the price or value of shares of any class or series of the Corporation, or any Synthetic Equity Interests or Short Interests, if any, and (F) any other information relating to such Proposing Person that would be required to be disclosed in a proxy statement or other filing required to be made in connection with solicitations of proxies or consents by such Proposing Person in support of the business proposed to be brought before the meeting pursuant to Section 14(a) of the Exchange Act (the disclosures to be made pursuant to the foregoing clauses (A) through (F) are referred to as "**Disclosable Interests**"); provided, however, that Disclosable Interests shall not include any such disclosures with respect to the ordinary course business activities of any broker, dealer, commercial bank, trust company or other nominee who is a Proposing Person solely as a result of being the stockholder directed to prepare and submit the notice required by these Bylaws on behalf of a beneficial owner; and

(iii) As to each Proposing Person, (A) a representation that the stockholder is a holder of record of stock of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business and (B) a representation whether the Proposing Person intends or is part of a group which intends (a) to deliver a proxy statement and/or form of proxy to holders of at least the percentage of the Corporation's outstanding capital stock required to approve or adopt the proposal and/or (b) otherwise to solicit proxies or votes from stockholders in support of such proposal.

(iv) As to each item of business that the stockholder proposes to bring before the annual meeting, (A) a reasonably brief description of the business desired to be brought before the annual meeting, the reasons for conducting such business at the annual meeting and any material interest in such business of each Proposing Person, (B) the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend the Bylaws of the Corporation, the language of the proposed amendment), and (C) a reasonably detailed description of all agreements, arrangements and understandings (x) between or among any of the Proposing Persons or (y) between or among any Proposing Person and any other person or entity (including their names) in connection with the proposal of such business by such stockholder.

(v) For purposes of this Section 2, the term "**Proposing Person**" shall mean (i) the stockholder providing the notice of business proposed to be brought before an annual meeting, (ii) the beneficial owner or beneficial owners, if different, on whose behalf the notice of the business proposed to be brought before the annual meeting is made, (iii) any affiliate or associate (each within the meaning of Rule 12b-2 under the Exchange Act for purposes of these Bylaws) of such stockholder or beneficial owner, and (iv) any other person with whom such stockholder or beneficial owner (or any of their respective affiliates or associates) is Acting in Concert (as defined below).

(vi) A person shall be deemed to be “*Acting in Concert*” with another person for purposes of these Bylaws if such person knowingly acts (whether or not pursuant to an express agreement, arrangement or understanding) in concert with, or towards a common goal relating to the management, governance or control of the Corporation in parallel with, such other person where (A) each person is conscious of the other person’s conduct or intent and this awareness is an element in their decision-making processes and (B) at least one (1) additional factor suggests that such persons intend to act in concert or in parallel, which such additional factors may include, without limitation, exchanging information (whether publicly or privately), attending meetings, conducting discussions, or making or soliciting invitations to act in concert or in parallel; provided, that a person shall not be deemed to be Acting in Concert with any other person solely as a result of the solicitation or receipt of revocable proxies or consents from such other person in response to a solicitation made pursuant to, and in accordance with, Section 14(a) of the Exchange Act by way of a proxy or consent solicitation statement filed on Schedule 14A. A person Acting in Concert with another person shall be deemed to be Acting in Concert with any third party who is also Acting in Concert with such other person.

(4) A stockholder providing notice of business proposed to be brought before an annual meeting shall further update and supplement such notice, if necessary, so that the information provided or required to be provided in such notice pursuant to this Section 2 shall be true and correct as of the record date for the meeting and as of the date that is ten (10) business days prior to the meeting or any adjournment or postponement thereof, and such update and supplement shall be delivered to, or mailed and received by, the Secretary of the Corporation at the principal executive offices of the Corporation not later than five (5) business days after the record date for the meeting (in the case of the update and supplement required to be made as of the record date), and not later than eight (8) business days prior to the date for the meeting or, if practicable, any adjournment or postponement thereof (and, if not practicable, on the first practicable date prior to the date to which the meeting has been adjourned or postponed) (in the case of the update and supplement required to be made as of ten (10) business days prior to the meeting or any adjournment or postponement thereof).

(5) The foregoing notice requirements of this Section 2 shall be deemed satisfied by a stockholder with respect to business other than a nomination if the stockholder has notified the Corporation of his, her or its intention to present a proposal at an annual meeting in compliance with applicable rules and regulations promulgated under the Exchange Act and such stockholder’s proposal has been included in a proxy statement that has been prepared by the Corporation to solicit proxies for such annual meeting.

(6) Except as otherwise expressly provided in any applicable rule or regulation promulgated under the Exchange Act, no business shall be conducted at an annual meeting except in accordance with this Section 2. Except as otherwise provided by law, the chairperson of the meeting shall have the power and duty, if the facts warrant, (a) to determine whether business was properly brought before the meeting in accordance with this Section 2 (including whether the Proposing Person solicited (or is part of a group which solicited) or did not so solicit, as the case may be, proxies or votes in support of such Proposing Person’s proposal in compliance with such Proposing Person’s representation as required by clause (3)(iii)(B) of this Section 2), and (b) if he or she should so determine that the business was not proposed in compliance with this Section 2, he or she shall so declare to the meeting and any such business

not properly brought before the meeting shall not be transacted. Notwithstanding the foregoing provisions of this Section 2, unless otherwise required by law, if the stockholder (or a qualified representative of the stockholder) does not appear at the annual meeting of stockholders of the Corporation to present the proposed business, such proposed business shall not be transacted, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of these Bylaws, to be considered a qualified representative of the stockholder, a person must be a duly authorized officer, manager or partner of such stockholder or must be authorized by a writing executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders and such person must produce such writing or electronic transmission, or a reliable reproduction of the writing or electronic transmission, at the meeting of stockholders.

(7) Notwithstanding the foregoing provisions of this Section 2 with respect to any business proposed to be brought before an annual meeting, each Proposing Person shall also comply with all applicable requirements of the Exchange Act and the rules and regulations promulgated thereunder with respect to any such business proposals; provided, however, that references in these Bylaws to the Exchange Act, or the rules and regulations promulgated thereunder are not intended to and shall not limit the requirements of these Bylaws applicable to proposals or any other business to be considered pursuant to this Section 2 (including paragraphs (1)(iii) and (2) hereof), and compliance with paragraphs (1)(iii) and (2) of this Section 2 shall be the exclusive means for a stockholder to submit other business (other than, as provided in paragraph (5) of this Section 2, business other than nominations brought properly under and in compliance with Rule 14a-8 of the Exchange Act, as may be amended from time to time). Nothing in this Section 2 shall be deemed to affect any rights of stockholders to request inclusion of proposals in the Corporation's proxy statement pursuant to applicable rules and regulations promulgated under the Exchange Act.

(8) For purposes of these Bylaws, "public disclosure" shall include disclosure in a press release reported by the Dow Jones News Service, Associated Press or other national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Sections 13, 14 or 15(d) of the Exchange Act and the rules and regulations promulgated thereunder.

Section 3. Advance Notice Provisions for Nominations of Directors.

(1) Nominations of any person for election to the Board at an annual meeting may be made at such meeting only (i) by or at the direction of the Board, including by any committee or persons appointed by the Board, (ii) pursuant to the Corporation's notice of meeting (or any supplement thereto) or (iii) by a stockholder who (A) was a stockholder of record of the Corporation (and, with respect to any beneficial owner, if different, on whose behalf such nomination is proposed to be made, only if such beneficial owner was the beneficial owner of shares of the Corporation) both at the time of giving the notice provided for in this Section 3 and at the time of the meeting, (B) is entitled to vote at the meeting and upon such election, and (C) has complied with this Section 3 as to such nomination.

(2) Without qualification, for a stockholder to make any nomination of a person or persons for election to the Board at an annual meeting, the stockholder must (i) provide

Timely Notice (as defined in Section 2(2) of this Article I) thereof in writing and in proper form to the Secretary of the Corporation and (ii) provide any updates or supplements to such notice at the times and in the forms required by this Section 3. Nominations of persons for election to the Board may be made at a special meeting of stockholders at which directors are to be elected if the election of directors is a matter specified in the notice of meeting given by or at the direction of the Board (i) by or at the direction of the Board (or any committee thereof), or (ii) provided that the Board has determined that directors shall be elected at such meeting, by any stockholder of the Corporation, who is a stockholder of record of the Corporation at the time the notice provided for in this Section 3 is delivered to the Secretary of the Corporation, who is entitled to vote at the special meeting and upon such election and who complies with the notice procedures set forth in this Section 3. The stockholder must (i) provide timely notice thereof in writing and in proper form to the Secretary of the Corporation at the principal executive offices of the Corporation, and (ii) provide any updates or supplements to such notice at the times and in the forms required by this Section 3. To be timely, a stockholder's notice for nominations to be made at a special meeting must be delivered to, or mailed and received at, the principal executive offices of the Corporation not earlier than the one hundred twentieth (120th) day prior to such special meeting and not later than the ninetieth (90th) day prior to such special meeting or, if later, the tenth (10th) day following the day on which public disclosure (as defined in Section 2(8) of this Article I) of the date of such special meeting and of the nominees proposed by the Board to be elected at such meeting was first made. In no event shall any adjournment or postponement of an annual meeting or special meeting or the announcement thereof commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above.

(3) To be in proper form for purposes of this Section 3, a stockholder's notice to the Secretary of the Corporation shall set forth:

(i) As to each Nominating Person (as defined below), the Stockholder Information (as defined in Section 2(3)(i) of this Article I, except that for purposes of this Section 3 the term "Nominating Person" shall be substituted for the term "Proposing Person" in all places it appears in Section 2(3)(i) of this Article I);

(ii) As to each Nominating Person, any Disclosable Interests (as defined in Section 2(3)(ii) of this Article I, except that for purposes of this Section 3 of this Article I the term "Nominating Person" shall be substituted for the term "Proposing Person" in all places it appears in Section 2(3)(ii) of this Article I and the disclosure in clause (F) of Section 2(3)(ii) of this Article I shall be made with respect to the election of directors at the meeting);

(iii) As to each Nominating Person, the information required to be disclosed pursuant to Section 2(3)(iii) of this Article I, except that for purposes of this Section 3 of this Article I, the term "Nominating Person" shall be substituted for the term "Proposing Person" in all places it appears in Section 2(3)(iii) of this Article I and the references to "proposal" or "business" shall be deemed to be reference to "nomination";

(iv) As to each person whom a Nominating Person proposes to nominate for election as a director, (A) all information with respect to such proposed nominee

that would be required to be set forth in a stockholder's notice pursuant to this Section 3 if such proposed nominee were a Nominating Person, (B) all information relating to such proposed nominee that is required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for election of directors in a contested election pursuant to Section 14(a) under the Exchange Act (including such proposed nominee's written consent to being named in the proxy statement as a nominee and to serving as a director if elected), (C) a description of all direct and indirect compensation and other material monetary agreements, arrangements and understandings during the past three (3) years, and any other material relationships, between or among any Nominating Person, on the one hand, and each proposed nominee, his or her respective affiliates and associates and any other persons with whom such proposed nominee (or any of his or her respective affiliates and associates) is Acting in Concert (as defined in Section 2(3)(vi) of this Article I), on the other hand, including, without limitation, all information that would be required to be disclosed pursuant to Item 404 under Regulation S-K if such Nominating Person were the "registrant" for purposes of such rule and the proposed nominee were a director or executive officer of such registrant and (D) a completed and signed questionnaire, representation and agreement as provided in Section 3(6) of this Article I;

(v) The Corporation may require any proposed nominee to furnish such other information (A) as may reasonably be required by the Corporation to determine the eligibility of such proposed nominee to serve as an independent director of the Corporation or (B) that could be material to a reasonable stockholder's understanding of the independence or lack of independence of such proposed nominee; and

(vi) For purposes of this Section 3, the term "**Nominating Person**" shall mean (A) the stockholder providing the notice of the nomination proposed to be made at the meeting, (B) the beneficial owner or beneficial owners, if different, on whose behalf the notice of the nomination proposed to be made at the meeting is made, (C) any affiliate or associate of such stockholder or beneficial owner, and (D) any other person with whom such stockholder or such beneficial owner (or any of their respective affiliates or associates) is Acting in Concert.

(4) A stockholder providing notice of any nomination proposed to be made at an annual or special meeting shall further update and supplement such notice, if necessary, so that the information provided or required to be provided in such notice pursuant to this Section 3 shall be true and correct as of the record date for the meeting and as of the date that is ten (10) business days prior to the meeting or any adjournment or postponement thereof, and such update and supplement shall be delivered to, or mailed and received by, the Secretary of the Corporation at the principal executive offices of the Corporation not later than five (5) business days after the record date for the meeting (in the case of the update and supplement required to be made as of the record date), and not later than eight (8) business days prior to the date for the meeting, or if practicable, any adjournment or postponement thereof (and if not practicable, on the first practicable date prior to the date to which the meeting has been adjourned or postponed) (in the case of the update and supplement required to be made as of ten (10) business days prior to the meeting or any adjournment or postponement thereof).

(5) Except as otherwise expressly provided in any applicable rule or regulation promulgated under the Exchange Act, no person shall be eligible for election as a director of the Corporation unless nominated in accordance with this Section 3. Except as otherwise provided by law, the chairperson of the meeting shall have the power and duty, if the facts warrant, (a) to determine whether a nomination was properly made in accordance with this Section 3 (including whether the stockholder or beneficial owner, if any, on whose behalf the nomination or proposal is made solicited (or is part of a group which solicited) or did not so solicit, as the case may be, proxies or votes in support of such stockholder's nominee or proposal in compliance with such stockholder's representation as required by clause (3)(iii) of this Section 3), and (b) if he or she should so determine that any proposed nomination was not made in compliance with this Section 3, he or she shall so declare such determination to the meeting and the defective nomination shall be disregarded. Notwithstanding the foregoing provisions of this Section 3, unless otherwise required by law, if the stockholder (or a qualified representative of the stockholder) does not appear at the annual or special meeting of stockholders of the Corporation to present a nomination, such nomination shall be disregarded, notwithstanding that proxies in respect of such vote may have been received by the Corporation.

(6) To be eligible to be a nominee for election as a director of the Corporation, the proposed nominee must deliver (in accordance with the time periods prescribed for delivery of notice under this Section 3) to the Secretary of the Corporation at the principal executive offices of the Corporation a written questionnaire with respect to the background and qualification of such proposed nominee (which questionnaire shall be provided by the Secretary of the Corporation upon written request) and a written representation and agreement (in form provided by the Secretary of the Corporation upon written request) that such proposed nominee (i) is not and will not become a party to (A) any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how such proposed nominee, if elected as a director of the Corporation, will act or vote on any issue or question (a **"Voting Commitment"**) that has not been disclosed to the Corporation or (B) any Voting Commitment that could limit or interfere with such proposed nominee's ability to comply, if elected as a director of the Corporation, with such proposed nominee's fiduciary duties under applicable law, (ii) is not, and will not become a party to, any agreement, arrangement or understanding with any person or entity other than the Corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a director that has not been disclosed to the Corporation and (iii) in such proposed nominee's individual capacity and on behalf of the stockholder (or the beneficial owner, if different) on whose behalf the nomination is made, would be in compliance, if elected to a director of the Corporation, and will comply with applicable publicly disclosed corporate governance, conflict of interest, confidentiality and stock ownership and trading policies and guidelines of the Corporation.

(7) Notwithstanding anything in the first sentence of paragraph 2 of this Section 3 to the contrary, in the event that the number of directors to be elected to the Board at an annual meeting is increased effective after the time period for which nominations would otherwise be due under paragraph (2) of this Section 3 and there is no public announcement by the Corporation naming the nominees for the additional directorships at least one hundred (100) days prior to the first anniversary of the preceding year's annual meeting, a stockholder's notice required by this Section 3 shall also be considered timely, but only with respect to nominees for

the additional directorships, if it shall be delivered to the Secretary at the principal executive offices of the Corporation not later than the close of business on the tenth (10th) day following the day on which such public disclosure is first made by the Corporation.

(8) In addition to the requirements of this Section 3 with respect to any nomination proposed to be made at a meeting, each Nominating Person shall comply with all applicable requirements of the Exchange Act and the rules and regulations promulgated thereunder with respect to any such nominations; provided, however, that references in these Bylaws to the Exchange Act, or the rules and regulations promulgated thereunder are not intended to and shall not limit the requirements of these Bylaws applicable to nominations to be considered pursuant to these Bylaws (including paragraphs (1)(iii) and (2) hereof), and compliance with paragraphs (1)(iii) and (2) of this Section 2 shall be the exclusive means for a stockholder to make nominations. Nothing in this Section 3 shall be deemed to affect any rights (a) of stockholders to request inclusion of nominations in the Corporation's proxy statement pursuant to applicable rules and regulations promulgated under the Exchange Act or (b) of the holders of any series of Preferred Stock to elect directors pursuant to any applicable provisions of the certificate of incorporation.

Section 4. Special Meetings.

(1) Special meetings of the stockholders for any purpose or purposes may be called at any time by the Board acting pursuant to a resolution adopted by a majority of the directors then in office, but such special meetings may not be called by any other person or persons. The Board may postpone or reschedule any previously scheduled special meeting.

(2) Only such business shall be conducted at a special meeting of stockholders as shall have been stated in the notice for such special meeting.

Section 5. Notice of Meetings.

Except as otherwise provided by law, notice of each meeting of stockholders, whether annual or special, shall be given not less than ten (10) days nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting as of the record date for determining the stockholders entitled to notice of the meeting. Without limiting the manner by which notice otherwise may be given to stockholders, any notice shall be effective if given by a form of electronic transmission consented to (in a manner consistent with the DGCL) by the stockholder to whom the notice is given. The notices of all meetings shall state the place, if any, date and time of the meeting and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting. The notice of a special meeting shall state, in addition, the purpose or purposes for which the meeting is called. If notice is given by mail, such notice shall be deemed given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation. If notice is given by electronic transmission, such notice shall be deemed given at the time specified in Section 232 of the DGCL. An affidavit of the Secretary or an Assistant Secretary of the Corporation or of the transfer agent or any other agent of the Corporation that the notice has been given by mail or by

a form of electronic transmission, as applicable, shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

Section 6. Quorum and Adjournment.

At any meeting of the stockholders, the holders of a majority in voting power of the stock issued and outstanding and entitled to vote at the meeting, present in person, present by any means of remote communication, authorized by the Board in its sole discretion, or represented by proxy, shall constitute a quorum for all purposes, unless or except to the extent that the presence of a larger number may be required by law, the Certificate of Incorporation or these Bylaws. Where a separate vote by a class or classes or series is required, a majority of the voting power of the shares of such class or classes or series present in person, present by any means of remote communication authorized by the Board in its sole discretion, or represented by proxy shall constitute a quorum entitled to take action with respect to that vote on that matter. A quorum, once established at a meeting, shall not be broken by the withdrawal of enough votes to leave less than a quorum.

If a quorum shall not be present or represented at any annual or special meeting of the stockholders, the chairperson of the meeting, or the holders of a majority in voting power of the shares of stock of the Corporation which are entitled to vote at the meeting and are present in person, present by any means of remote communication authorized by the Board in its sole discretion or represented by proxy, shall have power to adjourn the meeting from time to time until a quorum is present or represented. When a meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the time and place, if any, thereof, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken; provided, however, that if the date of any adjourned meeting is more than thirty (30) days after the date for which the meeting was originally noticed, notice of the place, if any, date, and time of the adjourned meeting and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting, shall be given in conformity herewith. If after the adjournment a new record date for determination of stockholders entitled to vote is fixed for the adjourned meeting, the Board shall fix as the record date for determining stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote at the adjourned meeting, and shall give notice of the adjourned meeting to each stockholder of record as of the record date so fixed for notice of such adjourned meeting. At any adjourned meeting, any business may be transacted which might have been transacted at the original meeting.

Section 7. Organization.

Such person as the Board may have designated or, in the absence of such a person, the Chairperson of the Board or, in his or her absence, the Chief Executive Officer of the Corporation or, in his or her absence, such person as may be chosen by the holders of a majority in voting power of the of stock of the Corporation which are entitled to vote at the meeting and are present in person, present by any means of remote communication authorized by the Board in its sole discretion, or represented by proxy, shall call to order any meeting of the stockholders

and act as chairperson of the meeting. In the absence of the Secretary of the Corporation, the secretary of the meeting shall be such person as the chairperson of the meeting appoints.

Section 8. Conduct of Business.

The chairperson of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including such regulation of the manner of voting and the conduct of discussion as seem to him or her in order. Except to the extent inconsistent with such rules and regulations as adopted by the Board, the chairperson of the meeting shall have the power to adjourn the meeting for any reason (or no reason) to another place, if any, date and time, to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairperson, are appropriate for the proper conduct of the meeting. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting by the chairperson of the meeting. The Board may adopt by resolution such rules and regulations for the conduct of the meeting of stockholders as it shall deem appropriate. Such rules, regulations or procedures, whether adopted by the Board or prescribed by the chairperson of the meeting, may include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders entitled to vote at the meeting, their duly authorized and constituted proxies or such other persons as the presiding person of the meeting shall determine; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (v) limitations on the time allotted to questions or comments by participants. The chairperson at any meeting of stockholders, in addition to making any other determinations that may be appropriate to the conduct of the meeting, shall, if the facts warrant, determine that a matter or business was not properly brought before the meeting and if such chairperson should so determine, such chairperson shall so declare to the meeting and any such matter or business not properly brought before the meeting shall not be transacted or considered. Unless and to the extent determined by the Board or the chairperson of the meeting, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

Section 9. Voting.

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 11 of this Article I, Section 217 (relating to voting rights of fiduciaries, pledgors and joint owners of stock) and Section 218 (relating to voting trusts and other voting agreements) of the DGCL.

Except as may be otherwise provided in the Certificate of Incorporation or these Bylaws, each stockholder voting shall be entitled to one (1) vote for each share of capital stock of the Corporation held by such stockholder which has voting power upon the matter in question.

At all meetings of stockholders for the election of directors at which a quorum is present a plurality of the votes cast shall be sufficient to elect a director. All other elections and questions presented to the stockholders at a meeting at which a quorum is present shall, unless otherwise provided by the Certificate of Incorporation, these Bylaws, the rules or regulations of

any stock exchange applicable to the Corporation, or applicable law or pursuant to any regulation applicable to the Corporation or its securities, be decided by the affirmative vote of the holders of a majority in voting power of the shares of stock of the Corporation which are entitled to vote at the meeting and are present in person, present by any means of remote communication authorized by the Board in its sole discretion or represented by proxy.

Section 10. Stockholder Action by Written Consent.

Subject to the rights of the holders of the shares of any series of Preferred Stock or any other class of stock or series thereof having a preference over the Common Stock as to dividends or upon liquidation, any action required or permitted to be taken by the stockholders of the Corporation must be effected at a duly called annual or special meeting of stockholders of the Corporation and may not be effected by any consent in writing by such stockholders.

Section 11. Record Date.

In order that the Corporation may determine the stockholders entitled to notice of any meeting of stockholders or any adjournment thereof, the Board may, except as otherwise required by law, fix a record date, which record date shall not precede the date on which the resolution fixing the record date is adopted and which record date shall, unless otherwise required by law, not be more than sixty (60) nor less than ten (10) days before the date of any meeting of stockholders. If the Board so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the Board determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination. If no record date is fixed by the Board, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board may fix a record date, which shall not be more than sixty (60) days prior to such other action. If no such record date is fixed for determining stockholders entitled to receive payment of any dividend or other distribution or allotment of rights or to exercise any rights of change, conversion or exchange of stock or for any other purpose, the record date shall be at the close of business on the day on which the Board adopts a resolution relating thereto.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote in accordance herewith at the adjourned meeting.

Section 12. Proxies and Voting.

Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy authorized by an instrument in writing or by a transmission permitted by law filed in accordance with the procedure established for the meeting, but no such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212 of the DGCL. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by delivering to the Secretary of the Corporation a revocation of the proxy or a new proxy bearing a later date. A proxy may be in the form of a telegram, cablegram or other means of electronic transmission which sets forth or is submitted with information from which it can be determined that the telegram, cablegram or other means of electronic transmission was authorized by the stockholder.

Section 13. Stock List.

The officer who has charge of the stock ledger of the Corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting (provided, however, if the record date for determining the stockholders entitled to vote is less than ten (10) days before the date of the meeting, the list shall reflect the stockholders entitled to vote as of the tenth day before the meeting date); arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. The Corporation shall not be required to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting for a period of at least ten (10) days prior to the meeting: (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the Corporation's principal executive office. In the event that the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is available only to stockholders of the Corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting. Such list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

Section 14. Inspectors of Election.

The Corporation shall, in advance of any meeting of stockholders, appoint one (1) or three (3) inspectors of election, who may be employees of the Corporation, to act at the meeting or its adjournment and make a written report thereof. The Corporation may designate one (1) or more alternate inspectors of election to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the person presiding at the

meeting may, and to the extent required by law, shall, appoint one (1) or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality, in good faith, and according to the best of his or her ability. Every vote taken by ballots shall be counted by a duly appointed inspector or inspectors of election. The inspector or inspectors so appointed or designated shall (i) ascertain the number of shares of capital stock of the Corporation outstanding and the voting power of each such share, (ii) determine the shares of capital stock of the Corporation represented at the meeting and the validity of proxies and ballots, (iii) count all votes and ballots, (iv) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors, and (v) certify their determination of the number of shares of capital stock of the Corporation represented at the meeting and such inspectors' count of all votes and ballots. Such certification and report shall specify such other information as may be required by law. In determining the validity and counting of proxies and ballots cast at any meeting of stockholders of the Corporation, the inspectors may consider such information as is permitted by applicable law. If there are three (3) inspectors of election, the decision, act or certificate of a majority is effective in all respects as the decision, act or certificate of all. Any report or certificate made by the inspector or inspectors of election is prima facie evidence of the facts stated therein. No person who is a candidate for an office at an election may serve as an inspector at such election.

ARTICLE II - DIRECTORS

Section 1. Powers.

Subject to the provisions of the DGCL and any limitations in the Certificate of Incorporation or these Bylaws relating to action required to be approved by the stockholders or by the outstanding shares, the business and affairs of the Corporation shall be managed and all corporate powers shall be exercised by or under the direction of the Board.

Section 2. Number of Directors.

Subject to the Certificate of Incorporation, the authorized number of directors shall be determined from time to time exclusively by resolution of the Board, provided the Board shall consist of at least one (1) member. No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

Section 3. Election, Qualification and Term of Office of Directors.

Except as provided in Section 4 of this Article II, each director, including a director elected to fill a vacancy, shall hold office until the expiration of the term for which elected and until such director's successor is elected and qualified or until such director's earlier death, resignation or removal. Directors need not be stockholders unless so required by the Certificate of Incorporation or these Bylaws. The Certificate of Incorporation or these Bylaws may prescribe other qualifications for directors.

If so provided in the Certificate of Incorporation, the directors of the Corporation shall be divided into three (3) classes.

Section 4. Resignation and Vacancies.

Any director may resign at any time upon notice given in writing or by electronic transmission to the Chairperson of the Board, CEO or Secretary of the Corporation, such resignation to specify whether it will be effective at a particular time, upon receipt or at the pleasure of the Board. If no such specification is made, it shall be deemed effective upon receipt. When one (1) or more directors so resigns and the resignation is effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office as provided in this Section 4 in the filling of other vacancies.

Unless otherwise provided in the Certificate of Incorporation or these Bylaws, any and all vacancies, however occurring, including without limit, by reason of an increase in the authorized number of directors or the death, resignation, disqualification or removal may only be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director (and not by stockholders) and each director so chosen shall hold office until the next annual meeting and until his or her successor is duly elected and qualified. If the directors are divided into classes, a person so elected by the directors then in office to fill a vacancy or newly created directorship shall hold office until the next election of the class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified.

Section 5. Place of Meetings; Meetings by Telephone.

The Board may hold meetings, both regular and special, either within or outside the State of Delaware.

Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, members of the Board, or any committee designated by the Board, may participate in a meeting of the Board, or any committee, by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting pursuant to this Section 5 shall constitute presence in person at the meeting.

Section 6. Regular Meetings.

Regular meetings of the Board may be held without notice at such time and at such place as shall from time to time be determined by the Board.

Section 7. Special Meetings; Notice.

Special meetings of the Board for any purpose or purposes may be called at any time by the chairperson of the Board, the chief executive officer, or a majority of the authorized number of directors.

Notice of the time and place of special meetings shall be:

- (i) delivered personally by hand, by courier or by telephone;
- (ii) sent by United States first-class mail, postage prepaid;
- (iii) sent by facsimile; or
- (iv) sent by electronic mail,

directed to each director at that director's address, telephone number, facsimile number or electronic mail address, as the case may be, as shown on the Corporation's records.

If the notice is (i) delivered personally by hand, by courier or by telephone, (ii) sent by facsimile or (iii) sent by electronic mail, it shall be delivered or sent at least twenty-four (24) hours before the time of the holding of the meeting. If the notice is sent by United States mail, it shall be deposited in the United States mail at least four (4) days before the time of the holding of the meeting. Any oral notice may be communicated to the director. The notice need not specify the place of the meeting (if the meeting is to be held at the Corporation's principal executive office) nor the purpose of the meeting.

Section 8. Conduct of Business.

At any meeting of the Board, business shall be transacted in such order and manner as the Board may from time to time determine. Meetings of the Board shall be presided over by the chairman of the Board or, in his or her absence, by a chairman chosen at the meeting. The Secretary shall act as secretary of the meeting, but in his or her absence, the chairman of the meeting may appoint any person to act as secretary of the meeting.

Section 9. Quorum.

At all meetings of the Board, the directors entitled to cast a majority of the votes of the total authorized number of directors shall constitute a quorum for the transaction of business. A majority of the votes entitled to be cast by the directors present at any meeting at which a quorum is present shall be the act of the Board, except as may be otherwise specifically provided by statute, the Certificate of Incorporation or these Bylaws. If a quorum is not present at any meeting of the Board, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

Section 10. Board Action by Written Consent Without a Meeting.

Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board, or of any committee thereof, may be taken without a meeting if all members of the Board or committee, as the case may be, consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the Board or

committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 11. Fees and Compensation of Directors.

Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, the Board shall have the authority to fix the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the Board.

Section 12. Removal of Directors.

Except as otherwise provided by the DGCL, the Board or any individual director may be removed from office at any time but only for cause and only by the affirmative vote of the holders of at least a majority of the voting power of all of the then outstanding shares of capital stock of the Corporation then entitled to vote at an election of directors, voting together as a single class. At least forty-five (45) days prior to any annual or special meeting of stockholders at which it is proposed that any director be removed from office, written notice of such proposed removal and the alleged grounds thereof shall be sent to the director whose removal will be considered at the meeting.

No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director's term of office.

ARTICLE III - COMMITTEES

Section 1. Committees of Directors.

The Board may designate one (1) or more committees, each committee to consist of one (1) or more of the directors of the Corporation. The Board may designate one (1) or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board or in these Bylaws, shall have and may exercise all the powers and authority of the Board in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority to (i) approve or adopt, or recommend to the stockholders, any action or matter expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopt, amend or repeal any bylaw of the Corporation.

Section 2. Committee Minutes.

Each committee shall keep regular minutes of its meetings and report the same to the Board when required.

Section 3. Meetings and Action of Committees.

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of:

- (i) Section 5 of Article II (place of meetings and meetings by telephone);
- (ii) Section 6 of Article II (regular meetings);
- (iii) Section 7 of Article II (special meetings and notice);
- (iv) Section 8 of Article II (conduct of business);
- (v) Section 9 of Article II (quorum);
- (vi) Section 2 of Article VIII (waiver of notice); and
- (vii) Section 10 of Article II (action without a meeting),

with such changes in the context of those Bylaws as are necessary to substitute the committee and its members for the Board and its members. However:

- (i) the time of regular meetings of committees may be determined either by resolution of the Board or by resolution of the committee;
- (ii) special meetings of committees may also be called by resolution of the Board; and
- (iii) notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The Board may adopt rules for the government of any committee not inconsistent with the provisions of these Bylaws.

ARTICLE IV - OFFICERS

Section 1. Officers.

The officers of the Corporation shall be a President and a Secretary. The Corporation may also have, at the discretion of the Board, a Chairperson of the Board, a Vice Chairperson of the Board, a Chief Executive Officer, a Chief Financial Officer or Treasurer, one (1) or more Vice Presidents, one (1) or more Assistant Vice Presidents, one (1) or more Assistant Treasurers, one (1) or more Assistant Secretaries, and any such other officers as may be appointed in accordance with the provisions of these Bylaws. Any number of offices may be held by the same person.

Section 2. Appointment of Officers.

The Board shall appoint the officers of the Corporation, except such officers as may be appointed in accordance with the provisions of Section 3 of this Article IV, subject to the rights, if any, of an officer under any contract of employment.

Section 3. Subordinate Officers.

The Board may appoint, or empower the Chief Executive Officer or, in the absence of a Chief Executive Officer, the President, to appoint, such other officers and agents as the business of the Corporation may require. Each of such officers and agents shall hold office for such period, have such authority, and perform such duties as are provided in these Bylaws or as the Board may from time to time determine.

Section 4. Removal and Resignation of Officers.

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by an affirmative vote of the majority of the Board then in office at any regular or special meeting of the Board or, except in the case of an officer chosen by the Board, by any officer upon whom such power of removal may be conferred by the Board.

Any officer may resign at any time by giving written notice to the Corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice. Unless otherwise specified in the notice of resignation, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the Corporation under any contract to which the officer is a party.

Section 5. Vacancies in Offices.

Any vacancy occurring in any office of the Corporation shall be filled by the Board or as provided in Section 3 of this Article IV.

Section 6. Representation of Shares of Other Corporations.

The Chairperson of the Board, the President, any Vice President, the Treasurer, the Secretary or Assistant Secretary of the Corporation, or any other person authorized by the Board or the President or a Vice President, is authorized to vote, represent and exercise on behalf of the Corporation all rights incident to any and all shares of any other corporation or corporations standing in the name of the Corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

Section 7. Authority and Duties of Officers.

All officers of the Corporation shall respectively have such authority and perform such duties in the management of the business of the Corporation as may be designated from

time to time by the Board or the stockholders and, to the extent not so provided, as generally pertain to their respective offices, subject to the control of the Board.

ARTICLE V - RECORDS AND REPORTS

Section 1. Maintenance and Inspection of Records.

The Corporation shall, either at its principal executive office or at such place or places as designated by the Board, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these Bylaws as amended to date, accounting books and other records.

In accordance with Delaware law, any stockholder of record, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the Corporation's stock ledger, a list of its stockholders, and its other books and records and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder. In every instance where an attorney or other agent is the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing that authorizes the attorney or other agent so to act on behalf of the stockholder. The demand under oath shall be directed to the Corporation at its registered office in Delaware or at its principal executive office.

Section 2. Inspection by Directors.

In accordance with Delaware law, any director shall have the right to examine the Corporation's stock ledger, a list of its stockholders, and its other books and records for a purpose reasonably related to his or her position as a director. The Court of Chancery is hereby vested with the exclusive jurisdiction to determine whether a director is entitled to the inspection sought. The Court may summarily order the Corporation to permit the director to inspect any and all books and records, the stock ledger, and the stock list and to make copies or extracts therefrom. The Court may, in its discretion, prescribe any limitations or conditions with reference to the inspection, or award such other and further relief as the Court may deem just and proper.

ARTICLE VI - STOCK

Section 1. Certificates of Stock; Uncertificated Shares.

The shares of the Corporation shall be evidenced by certificates; provided, however, that the Board may provide by resolution or resolutions that some or all of any or all classes or series of stock of the Corporation shall be uncertificated shares. Any such resolution shall not apply to shares evidenced by a certificate until such certificate is surrendered to the Corporation. Notwithstanding the adoption of such a resolution by the Board, every holder of stock evidenced by certificates, and upon request every holder of uncertificated shares, shall be entitled to have a certificate signed by, or in the name of the Corporation by, the Chairperson or a Vice-Chairperson of the Board or the President or a Vice President, and by the Secretary or an Assistant Secretary, or the Chief Financial Officer, or the Treasurer or an Assistant Treasurer,

certifying the number of shares owned by him or her. Any or all of the signatures on the certificate may be by facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue.

Section 2. Transfers of Stock.

Subject to any restrictions on transfer and unless otherwise provided by the Board, shares of stock that are represented by a certificate may be transferred on the books of the Corporation by the surrender to the Corporation or its transfer agent of the certificate theretofore properly endorsed or accompanied by a written assignment or power of attorney properly executed, with transfer stamps (if necessary) affixed, and with such proof of the authenticity of signature as the Corporation or its transfer agent may reasonably require. Shares of stock that are not represented by a certificate may be transferred on the books of the Corporation by submitting to the Corporation or its transfer agent such evidence of transfer and following such other procedures as the Corporation or its transfer agent may require.

Section 3. Registered Stockholders.

The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of the State of Delaware.

Section 4. Lost, Stolen or Destroyed Certificates.

In the event of the loss, theft or destruction of any certificate of stock, another may be issued in its place pursuant to such regulations as the Corporation may establish concerning proof of such loss, theft or destruction and concerning the giving of a satisfactory bond or bonds of indemnity.

Section 5. Regulations.

The issue, transfer, conversion and registration of certificates of stock shall be governed by such other regulations as the Board may establish.

ARTICLE VII - OTHER SECURITIES OF THE CORPORATION

All bonds, debentures and other corporate securities of the Corporation, other than stock certificates (covered in Article VI), may be signed by the Chairperson of the Board, the Chief Executive Officer, the President or any Vice President, or such other person as may be authorized by the Board, and the corporate seal impressed thereon or a facsimile of such seal imprinted thereon and attested by the signature of the Secretary or an Assistant Secretary, or the Chief Financial Officer or Treasurer or an Assistant Treasurer; provided, however, that where any such bond, debenture or other corporate security shall be authenticated by the manual

signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security shall be issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or other corporate security, authenticated by a trustee as aforesaid, shall be signed by the Treasurer or an Assistant Treasurer of the Corporation or such other person as may be authorized by the Board, or bear imprinted thereon the facsimile signature of such person.

ARTICLE VIII - NOTICES

Section 1. Notices.

If mailed, notice to stockholders shall be deemed given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders may be given by facsimile, telegraph, telex or by electronic transmission in the manner provided in Section 232 of the DGCL.

Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the Corporation under the provisions of the DGCL, the Corporation's Amended and Restated Certificate of Incorporation or these Bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Any stockholder who fails to object in writing to the Corporation, within sixty (60) days of having been given written notice by the Corporation of its intention to send such single notice, shall be deemed to have consented to receiving such single written notice. Any such consent shall be revocable by the stockholder by written notice to the Corporation.

Section 2. Waivers.

A written waiver of any notice, signed by a stockholder or director entitled to notice, or waiver by electronic transmission by such person, whether given before or after the time of the event for which notice is to be given, shall be deemed equivalent to the notice required to be given to such person. Neither the business nor the purpose of any meeting need be specified in such a waiver. Attendance at any meeting shall constitute waiver of notice except attendance for the sole purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

ARTICLE IX - MISCELLANEOUS

Section 1. Facsimile Signatures.

In addition to the provisions for use of facsimile signatures elsewhere specifically authorized in these Bylaws, facsimile signatures of any officer or officers of the Corporation may be used whenever and as authorized by the Board or a committee thereof.

Section 2. Corporate Seal.

The Board may provide a suitable seal, containing the name of the Corporation, which seal shall be in the charge of the Secretary of the Corporation. If and when so directed by the Board or a committee thereof, duplicates of the seal may be kept and used by the Treasurer or by an Assistant Secretary or Assistant Treasurer.

Section 3. Reliance upon Books, Reports and Records.

To the fullest extent permitted by applicable law, each director and each member of any committee designated by the Board, in the performance of his or her duties, shall be fully protected in relying in good faith upon the books of account or other records of the Corporation and upon such information, opinions, reports or statements presented to the Corporation by any of its officers or employees, or committees of the Board so designated, or by any other person as to matters which such director or committee member reasonably believes are within such other person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Corporation.

Section 4. Fiscal Year.

The fiscal year of the Corporation shall be as fixed by resolution of the Board.

Section 5. Time Periods.

In applying any provision of these Bylaws that requires that an act be done or not be done a specified number of days prior to an event or that an act be done during a period of a specified number of days prior to an event, calendar days shall be used, the day of the doing of the act shall be excluded, and the day of the event shall be included.

Section 6. Other Offices.

The registered office of the Corporation shall be fixed in the Corporation's Certificate of Incorporation, as same may be amended from time to time. The Corporation shall also have and maintain an office or principal place of business at such place as may be fixed by the Board, and may also have offices at such other places, both within and without the State of Delaware as the Board may from time to time determine or the business of the Corporation may require.

Section 7. Execution of Corporate Instruments.

The Board may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute on behalf of the Corporation any corporate instrument or document, or to sign on behalf of the Corporation the corporate name without limitation, or to enter into contracts on behalf of the Corporation, except where otherwise provided by law or these Bylaws, and such execution or signature shall be binding upon the Corporation.

All checks and drafts drawn on banks or other depositories on funds to the credit of the Corporation or in special accounts of the Corporation shall be signed by such person or persons as provided in these Bylaws or as the Board shall authorize so to do.

Unless authorized or ratified by the Board or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the Corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

ARTICLE X - INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 1. Right to Indemnification.

Each person who was or is made a party or is threatened to be made a party to or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a **“Proceeding”**), by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was a director or an officer of the Corporation or is or, while a director or officer of the Corporation, was serving at the request of the Corporation as a director, officer, employee, agent or trustee of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan (hereinafter an **“Indemnitee”**), whether the basis of such proceeding is alleged action in an official capacity as a director, officer, employee, agent or trustee or in any other capacity while serving as a director, officer, employee, agent or trustee, shall be indemnified and held harmless by the Corporation to the fullest extent permitted by Delaware law, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), against all expense, liability and loss (including attorneys’ fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such Indemnitee in connection therewith; provided, however, that, except as provided in Section 3 of this Article X with respect to proceedings to enforce rights to indemnification, the Corporation shall indemnify any such Indemnitee in connection with a Proceeding (or part thereof) initiated by such Indemnitee only if such Proceeding (or part thereof) was authorized in the specific case by the Board of the Corporation or is expressly required by law.

Section 2. Right to Advancement of Expenses.

In addition to the right to indemnification conferred in Section 1 of this Article X, an Indemnitee shall, to the fullest extent not prohibited by applicable law, also have the right to

be paid by the Corporation the expenses (including attorney's fees) incurred in defending any such Proceeding in advance of its final disposition (hereinafter an "**Advancement of Expenses**"); provided, however, that, if required by the DGCL, an Advancement of Expenses incurred by an Indemnitee in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such Indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the Corporation of an undertaking (hereinafter an "**Undertaking**"), by or on behalf of such Indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal (hereinafter a "**Final Adjudication**") that such Indemnitee is not entitled to be indemnified for such expenses under Section 1 of this Article X or otherwise.

Section 3. Right of Indemnitee to Bring Suit.

If a claim under Section 1 (following the final disposition of such proceeding) or 2 of this Article X is not paid in full by the Corporation within sixty (60) days after a written claim has been received by the Corporation, except in the case of a claim for an advancement of expenses, in which case the applicable period shall be twenty (20) days, the Indemnitee may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim. If successful in whole or in part in any such suit, or in a suit brought by the Corporation to recover an Advancement of Expenses pursuant to the terms of an Undertaking, the Indemnitee shall be entitled to be paid also the expense of prosecuting or defending such suit to the fullest extent permitted by law. In (i) any suit brought by the Indemnitee to enforce a right to indemnification hereunder (but not in a suit brought by the Indemnitee to enforce a right to an Advancement of Expenses), it shall be a defense that, and (ii) any suit brought by the Corporation to recover an Advancement of Expenses pursuant to the terms of an Undertaking, the Corporation shall be entitled to recover such expenses upon a Final Adjudication that, in either case the Indemnitee has not met any applicable standard for indemnification set forth in the DGCL. Neither the failure of the Corporation (including its directors who are not parties to such action, a committee of such directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such suit that indemnification of the Indemnitee is proper in the circumstances because the Indemnitee has met the applicable standard of conduct set forth in the DGCL, nor an actual determination by the Corporation (including its directors who are not parties to such action, a committee of such directors, independent legal counsel, or its stockholders) that the Indemnitee has not met such applicable standard of conduct, shall create a presumption that the Indemnitee has not met the applicable standard of conduct or, in the case of such a suit brought by the Indemnitee, be a defense to such suit. In any suit brought by the Indemnitee to enforce a right to indemnification or to an Advancement of Expenses hereunder, or brought by the Corporation to recover an Advancement of Expenses pursuant to the terms of an Undertaking, the burden of proving that the Indemnitee is not entitled to be indemnified, or to such Advancement of Expenses, under this Article X or otherwise shall be on the Corporation.

Section 4. Non-Exclusivity of Rights.

The rights to indemnification and to the Advancement of Expenses conferred in this Article X shall not be exclusive of any other right that any person may have or hereafter

acquire under any statute, the Corporation's Amended and Restated Certificate of Incorporation, these Bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

Section 5. Insurance.

The Corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the DGCL.

Section 6. Indemnification of Employees and Agents of the Corporation.

The Corporation may, to the extent authorized from time to time by the Board, grant rights to indemnification and to the advancement of expenses to any employee or agent of the Corporation to the fullest extent of the provisions of this Article X with respect to the indemnification and advancement of expenses of directors and officers of the Corporation.

Section 7. Other Indemnification.

The Corporation's obligation, if any, to indemnify or advance expenses to any Indemnitee who was or is serving at its request as a director, officer, employee, agent or trustee of another corporation, partnership, joint venture, trust, enterprise or non-profit entity shall be reduced by any amount such Indemnitee may collect as indemnification or advancement of expenses from such other corporation, partnership, joint venture, trust, enterprise or non-profit enterprise.

Section 8. Nature of Rights.

The rights conferred upon indemnitees in this Article X shall be contract rights and such rights shall continue as to an Indemnitee who has ceased to be a director, officer or trustee and shall inure to the benefit of the Indemnitee's heirs, executors and administrators. Any amendment, alteration or repeal of this Article X that adversely affects any right of an Indemnitee or its successors shall be prospective only and shall not limit or eliminate any such right with respect to any Proceeding involving any occurrence or alleged occurrence of any action or omission to act that took place prior to such amendment, alteration or repeal.

Section 9. Saving Clause.

If this Article X or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Corporation shall nevertheless indemnify and advance expenses to each director and officer to the fullest extent not prohibited by any applicable portion of this Article X that shall not have been invalidated, or by any other applicable law. If this Article X shall be invalid due to the application of the indemnification provisions of another jurisdiction, then the Corporation shall indemnify and advance expenses to each director and officer to the fullest extent permitted under any other applicable law.

ARTICLE XI - LOANS TO OFFICERS

Except as otherwise prohibited by applicable law, including the Sarbanes-Oxley Act of 2002, the Corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the Corporation or of its subsidiaries, including any officer or employee who is a director of the Corporation or its subsidiaries, whenever, in the judgment of the Board, such loan, guarantee or assistance may reasonably be expected to benefit the Corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board shall approve, including, without limitation, a pledge of shares of stock of the Corporation. Nothing in these Bylaws shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the Corporation at common law or under any statute.

ARTICLE XII - AMENDMENTS

In furtherance and not in limitation of the powers conferred by law, the Board is expressly authorized to adopt, amend and repeal these Bylaws subject to the power of the holders of capital stock of the Corporation to adopt, amend or repeal Bylaws of the Corporation; provided, however, that, with respect to the power of holders of capital stock to adopt, amend and repeal Bylaws of the Corporation, notwithstanding any other provision of these Bylaws or any provision of law that might otherwise permit a lesser vote or no vote, but in addition to any affirmative vote of the holders of any particular class or series of the capital stock of the Corporation required by law, these Bylaws or any preferred stock, the affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of all of the then-outstanding shares entitled to vote generally in the election of directors, voting together as a single class, shall be required to adopt, amend or repeal any provision of these Bylaws.

CERTIFICATE OF SECRETARY

The undersigned hereby certifies that:

1. The undersigned is the duly elected and acting Secretary of Gevo, Inc., a Delaware corporation (the “**Company**”); and
2. The foregoing bylaws constitute the bylaws of the Company as amended and restated by the Company’s Board of Directors on February 8th, 2011.

IN WITNESS WHEREOF, the undersigned has executed this certificate effective the 14th day of February, 2011.

/s/ Brett Lund
Brett Lund, Secretary

GEVO, INC.
2010 STOCK INCENTIVE PLAN

As approved by:
the stockholders of
Gevo, Inc.
on February 4, 2011.

GEVO, INC.
2010 STOCK INCENTIVE PLAN

Plan Document

1. Introduction.

(a) *Purpose.* Gevo, Inc. (the “Company”) hereby establishes this equity-based incentive compensation plan to be known as the “Gevo, Inc. 2010 Stock Incentive Plan” (the “Plan”), for the following purposes: (i) to enhance the Company’s ability to attract highly qualified personnel; (ii) to strengthen its retention capabilities; (iii) to enhance the long-term performance and competitiveness of the Company; and (iv) to align the interests of Plan participants with those of the Company’s stockholders. This Plan is intended to serve as the sole source for all future equity-based awards to those eligible for Plan participation.

(b) *Effective Date.* This Plan shall become effective on the closing date (the “Effective Date”) of the Company’s initial public offering; subject to the Plan’s receipt of stockholder approval beforehand in accordance with the Company’s governing instruments.

(c) *Definitions.* Terms in the Plan and its Appendix that begin with an initial capital letter have the defined meaning set forth in *Appendix I* or elsewhere in this Plan, in either case unless the context of their use clearly indicates a different meaning.

(d) *Effect on Other Plans, Awards, and Arrangements.* This Plan is not intended to affect and shall not affect any stock options, equity-based compensation, or other benefits that the Company or its Affiliates may have provided, or may separately provide in the future, pursuant to any agreement, plan, or program that is independent of this Plan.

(e) *Sole Source for Future Stock Awards.* Notwithstanding any other provision of the Plan, no further awards of any kind shall occur under any other Company plan or program that entails the issuance of Share-settled awards (including but not limited to the Prior Plan), and any Shares that are currently subject to awards under any such plans which are subsequently forfeited, cancelled, settled or lapse unexercised shall be added to the reserve of Shares that are authorized and available for issuance pursuant to this Plan.

2. Types of Awards. The Plan permits the granting of the following types of Awards according to the Sections of the Plan listed here:

Section 5	Stock Options
Section 6	Share Appreciation Rights (“ <u>SARs</u> ”)
Section 7	Restricted Shares, Restricted Share Units (“ <u>RSUs</u> ”), and Unrestricted Shares
Section 8	Deferred Share Units (“ <u>DSUs</u> ”)
Section 9	Performance and Cash-settled Awards
Section 10	Dividend Equivalent Rights

3. Shares Available for Awards.

(a) *Generally.* Subject to Section 3(b) and Section 13 below, the aggregate number of Shares which may be issued pursuant to Awards under the Plan is the sum of (i) 2,571,286 Shares and (ii) any Shares which as of the Effective Date are subject to awards under the Prior Plan which are subsequently forfeited, cancelled, settled, or lapse unexercised. The Shares deliverable pursuant to Awards shall be authorized but unissued Shares, or Shares that the Company otherwise holds in treasury or in trust.

(b) *Replenishment; Counting of Shares.* Any Shares reserved for Plan Awards will again be available for future Awards if the Shares for any reason will never be issued to a Participant or Beneficiary pursuant to an Award (for example, due to its settlement in cash rather than in Shares, or the Award's forfeiture, cancellation, expiration, or net settlement without the issuance of Shares). Further, and to the extent permitted under Applicable Law, the maximum number of Shares available for delivery under the Plan shall not be reduced by any Shares issued under the Plan through the settlement, assumption, or substitution of outstanding awards or obligations to grant future awards as a condition of the Company's or an Affiliate's acquiring another entity. On the other hand, Shares that a Person owns and tenders in payment of all or part of the exercise price of an Award or in satisfaction of applicable Withholding Taxes shall not increase the number of Shares available for future issuance under the Plan.

(c) *Award Vesting Limitation.* Notwithstanding any other provision of the Plan to the contrary, Awards shall become vested on a pro rata basis over a period of not less than three years (or, in the case of vesting with respect to Performance Awards, over a period of not less than one year measured from the commencement of the period over which performance is evaluated) following the Grant Date; *provided, however,* that, notwithstanding the foregoing, Awards that result in the issuance of an aggregate of up to 10% of the Shares available pursuant to Section 3(a), as adjusted pursuant to Section 13 below, may be granted to any one or more Eligible Persons without respect to such minimum vesting provisions.

4. Eligibility.

(a) *General Rule.* Subject to the express provisions of the Plan, the Committee shall determine from the class of Eligible Persons those Persons to whom Awards may be granted. Each Award shall be evidenced by an Award Agreement that sets forth its Grant Date and all other terms and conditions of the Award, that is signed on behalf of the Company (or delivered by an authorized agent through an electronic medium), and that, if required by the Committee, is signed by the Eligible Person as an acceptance of the Award. The grant of an Award shall not obligate the Company or any Affiliate to continue the employment or service of any Eligible Person, or to provide any future Awards or other remuneration at any time thereafter.

(b) *Option and SAR Limits per Person.* During the term of the Plan, no Participant may receive Options and SARs that relate to more than 20% of the maximum number of Shares issuable under the Plan as of its Effective Date, as such number may be adjusted pursuant to Section 13 below.

(c) *Replacement Awards*. Subject to Applicable Law (including any associated stockholder approval requirements), the Committee may, in its sole discretion and upon such terms as it deems appropriate, require as a condition of the grant of an Award to a Participant that the Participant consent to surrender for cancellation some or all of the Awards or other grants that the Participant has received under this Plan or otherwise. An Award conditioned upon such surrender may or may not be the same type of Award, may cover the same (or a lesser or greater) number of Shares as such surrendered Award, may have other terms that are determined without regard to the terms or conditions of such surrendered Award, and may contain any other terms that the Committee deems appropriate. In the case of Options and SARs, these other terms may not involve an exercise price that is lower than the exercise price of the surrendered Option or SAR unless the Company's stockholders approve the grant itself or the program under which the grant is made pursuant to the Plan.

5. **Stock Options.**

(a) *Grants*. Subject to the special rules for ISOs set forth in the next paragraph, the Committee may grant Options to Eligible Persons pursuant to Award Agreements setting forth terms and conditions that are not inconsistent with the Plan, that may be immediately exercisable or that may become exercisable in whole or in part based on future events or conditions, that may include vesting or other requirements for the right to exercise the Option, and that may differ for any reason between Eligible Persons or classes of Eligible Persons, provided in all instances that:

- (i) the exercise price for Shares subject to purchase through exercise of an Option shall not be less than 100% of the Fair Market Value of the underlying Shares on the Grant Date; and
- (ii) no Option shall be exercisable for a term ending more than ten years after its Grant Date.

(b) *Special ISO Provisions*. The following provisions shall control any grants of Options that are denominated as ISOs; provided that ISOs may not be awarded unless the Plan receives stockholder approval within twelve (12) months after its Effective Date, and ISOs may not be granted more than ten (10) years after Board approval of the Plan.

- (i) Eligibility. The Committee may grant ISOs only to Employees (including officers who are Employees) of the Company or an Affiliate that is a "parent corporation" or "subsidiary corporation" within the meaning of Code Section 424.
- (ii) Documentation. Each Option that is intended to be an ISO must be designated in the Award Agreement as an ISO, provided that any Option designated as an ISO will be a Non-ISO to the extent the Option fails to meet the requirements of Code Section 422 or the provisions of this Section 5(b). In the case of an ISO, the Committee shall determine on the Date of Grant the acceptable methods of paying the exercise price for Shares, and it shall be included in the applicable Award Agreement.

- (iii) **\$100,000 Limit.** To the extent that the aggregate Fair Market Value of Shares with respect to which ISOs first become exercisable by a Participant in any calendar year (under this Plan and any other plan of the Company or any Affiliate) exceeds U.S. \$100,000, such excess Options shall be treated as Non-ISOs. For purposes of determining whether the U.S. \$100,000 limit is exceeded, the Fair Market Value of the Shares subject to an ISO shall be determined as of the Grant Date. In reducing the number of Options treated as ISOs to meet the U.S. \$100,000 limit, the most recently granted Options shall be reduced first. In the event that Code Section 422 is amended to alter the limitation set forth therein, the limitation of this paragraph shall be automatically adjusted accordingly.
- (iv) **Grants to 10% Holders.** In the case of an ISO granted to an Employee who is a Ten Percent Holder on the Grant Date, the ISO's term shall not exceed five years from the Grant Date, and the exercise price shall be at least 110% of the Fair Market Value of the underlying Shares on the Grant Date. In the event that Code Section 422 is amended to alter the limitations set forth therein, the limitation of this paragraph shall be automatically adjusted accordingly.
- (v) **Substitution of Options.** In the event the Company or an Affiliate acquires (whether by purchase, merger, or otherwise) all or substantially all of outstanding capital stock or assets of another corporation or in the event of any reorganization or other transaction qualifying under Code Section 424, the Committee may, in accordance with the provisions of that Section, substitute ISOs for ISOs previously granted under the plan of the acquired company provided (A) the excess of the aggregate Fair Market Value of the Shares subject to an ISO immediately after the substitution over the aggregate exercise price of such shares is not more than the similar excess immediately before such substitution, and (B) the new ISO does not give additional benefits to the Participant, including any extension of the exercise period.
- (vi) **Notice of Disqualifying Dispositions.** By executing an ISO Award Agreement, each Participant agrees to notify the Company in writing immediately after the Participant sells, transfers or otherwise disposes of any Shares acquired through exercise of the ISO, if such disposition occurs within the earlier of (A) two years of the Grant Date, or (B) one year after the exercise of the ISO being exercised. Each Participant further agrees to provide any information about a disposition of Shares as may be requested by the Company to assist it in complying with any applicable tax laws.

(c) *Method of Exercise.* Each Option may be exercised, in whole or in part (provided that the Company shall not be required to issue fractional shares) at any time and from time to time prior to its expiration, but only pursuant to the terms of the applicable Award Agreement, and subject to the times, circumstances and conditions for exercise contained in the applicable Award Agreement. Exercise shall occur by delivery of both written notice of exercise to the secretary of the Company, and payment of the full exercise price for the Shares being purchased. The methods of payment that the Committee may in its discretion accept or commit to accept in an Award Agreement include:

- (i) cash or check payable to the Company (in U.S. dollars);

- (ii) other Shares that (A) are owned by the Participant who is purchasing Shares pursuant to an Option, (B) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which the Option is being exercised, (C) are all, at the time of such surrender, free and clear of any and all claims, pledges, liens and encumbrances, or any restrictions which would in any manner restrict the transfer of such shares to or by the Company (other than such restrictions as may have existed prior to an issuance of such Shares by the Company to such Participant), and (D) are duly endorsed for transfer to the Company;
- (iii) a net exercise by surrendering to the Company Shares otherwise receivable upon exercise of the Option;
- (iv) a cashless exercise program that the Committee may approve, from time to time in its discretion, pursuant to which a Participant may elect to concurrently provide irrevocable instructions (A) to such Participant's broker or dealer to effect the immediate sale of the purchased Shares and remit to the Company, out of the sale proceeds available on the settlement date, sufficient funds to cover the exercise price of the Option plus all applicable taxes required to be withheld by the Company by reason of such exercise, and (B) to the Company to deliver the certificates for the purchased Shares directly to such broker or dealer in order to complete the sale; or
- (v) any combination of the foregoing methods of payment.

The Company shall not be required to deliver Shares pursuant to the exercise of an Option until the Company has received sufficient funds to cover the full exercise price due and all applicable Withholding Taxes required by reason of such exercise.

Notwithstanding any other provision of the Plan to the contrary, no Participant who is a Director or an "executive officer" of the Company within the meaning of Section 13(k) of the Exchange Act shall be permitted to make payment with respect to any Awards granted under the Plan, or continue any extension of credit with respect to such payment with a loan from the Company or a loan arranged by the Company in violation of Section 13(k) of the Exchange Act.

(d) *Exercise of an Unvested Option.* The Committee in its sole discretion may allow a Participant to exercise an unvested Option, in which case the Shares then issued shall be Restricted Shares having analogous vesting restrictions to the unvested Option.

(e) *Termination of Continuous Service.* The Committee may establish and set forth in the applicable Award Agreement the terms and conditions on which an Option shall remain exercisable, if at all, following termination of a Participant's Continuous Service. The Committee may waive or modify these provisions at any time. To the extent that a Participant is not entitled to exercise an Option at the date of his or her termination of Continuous Service, or if the Participant (or other person entitled to exercise the Option) does not exercise the Option to the extent so entitled within

the time specified in the Award Agreement or below (as applicable), the Option shall terminate and the Shares underlying the unexercised portion of the Option shall revert to the Plan and become available for future Awards.

The following provisions shall apply to the extent an Award Agreement does not specify the terms and conditions upon which an Option shall terminate when there is a termination of a Participant's Continuous Service:

Reason for terminating Continuous Service	Option Termination Date
(I) By the Company for Cause, or what would have been Cause if the Company had known all of the relevant facts.	Termination of the Participant's Continuous Service, or when Cause first existed if earlier.
(II) Disability of the Participant.	Within one year after termination of the Participant's Continuous Service.
(III) Retirement of the Participant.	Within six months after termination of the Participant's Continuous Service.
(IV) Death of the Participant during Continuous Service or within 90 days thereafter.	Within one year after termination of the Participant's Continuous Service.
(V) Other than any of the above.	Within 90 days after termination of the Participant's Continuous Service.

If there is a Securities and Exchange Commission blackout period (or a Committee-imposed blackout period) that prohibits the buying or selling of Shares during any part of the ten day period before the expiration of any Option based on the termination of a Participant's Continuous Service (as described above), the period for exercising the Option shall be extended until ten days beyond when such blackout period ends. Notwithstanding any provision hereof or within an Award Agreement, no Option shall ever be exercisable after the expiration date of its original term as set forth in the Award Agreement.

(f) *Buyout.* The Committee may at any time offer to buy out an Option, in exchange for a payment in cash or Shares, based on such terms and conditions as the Committee shall establish and communicate to the Participant at the time that such offer is made. In addition, but subject to Applicable Law, if the Fair Market Value for Shares subject to any Option or Options is more than 50% below their exercise price for more than 30 consecutive business days, the Committee may unilaterally declare such Option to be terminated, effective on the date on which the Committee provides written notice to the Participant or other Option holder. The Committee may take such action with respect to any or all Options granted under the Plan and with respect to any individual Option holder or class or classes of Option holders, and the Committee shall not have any obligation to be uniform, consistent, or nondiscriminatory between classes of similarly-situated Option holders, except as required by Applicable Law (including any applicable stockholder approval requirements for a re-pricing or similar option cancellation program).

6. SARs.

(a) *Grants.* The Committee may grant SARs to Eligible Persons pursuant to Award Agreements setting forth terms and conditions that are not inconsistent with the Plan; provided that:

- (i) the exercise price for the Shares subject to each SAR shall not be less than 100% of the Fair Market Value of the underlying Shares on the Grant Date;
- (ii) no SAR shall be exercisable for a term ending more than ten years after its Grant Date; and
- (iii) each SAR shall, except to the extent a SAR Award Agreement provides otherwise, be subject to the provisions of Section 5(e) relating to the effect of a termination of Participant's Continuous Service and Section 5(f) relating to buyouts, in each case with "SAR" being substituted for "Option."

(b) *Settlement.* Subject to the Plan's terms, a SAR shall entitle the Participant, upon exercise of the SAR, to receive Shares having a Fair Market Value on the date of exercise equal to the product of the number of Shares as to which the SAR is being exercised, and the excess of (i) the Fair Market Value, on such date, of the Shares covered by the exercised SAR, over (ii) an exercise price designated in the SAR Award Agreement. Notwithstanding the foregoing, a SAR Award Agreement may limit the total settlement value that the Participant will be entitled to receive upon the SAR's exercise, and may provide for settlement either in cash or in any combination of cash or Shares that the Committee may authorize pursuant to an Award Agreement. If, on the date on which a SAR or portion thereof is to expire, the Fair Market Value of the underlying Shares exceeds the aggregate exercise price of such SAR, then the SAR shall be deemed exercised and the Participant shall within ten days thereafter receive the Shares that would have been issued on such date if the Participant had affirmatively exercised the SAR on that date.

(c) *SARs related to Options.* The Committee may grant SARs either concurrently with the grant of an Option or with respect to an outstanding Option, in which case the SAR shall extend to all or a portion of the Shares covered by the related Option, and shall have an exercise price that is not less than the exercise price of the related Option. A SAR shall entitle the Participant who holds the related Option, upon exercise of the SAR and surrender of the related Option, or portion thereof, to the extent the SAR and related Option each were previously unexercised, to receive payment of an amount determined pursuant to Section 6(b) above. Any SAR granted in tandem with an ISO will contain such terms as may be required to comply with the provisions of Code Section 422.

(d) *Effect on Available Shares.* Upon each exercise of a SAR that is settled in Shares, only those Shares that are issued or delivered in settlement of the exercise shall be counted against the number of Shares available for Awards under the Plan.

7. Restricted Shares, RSUs, and Unrestricted Share Awards.

(a) *Grant.* The Committee may grant Restricted Share, RSU, or Unrestricted Share Awards to Eligible Persons, in all cases pursuant to Award Agreements setting forth terms and conditions that are not inconsistent with the Plan. The Committee shall establish as to each

Restricted Share or RSU Award the number of Shares deliverable or subject to the Award (which number may be determined by a written formula), and the period or periods of time (the “Restriction Period”) at the end of which all or some restrictions specified in the Award Agreement shall lapse, and the Participant shall receive unrestricted Shares (or cash to the extent provided in the Award Agreement) in settlement of the Award. Such restrictions may include, without limitation, restrictions concerning voting rights and transferability, and such restrictions may lapse separately or in combination at such times and pursuant to such circumstances or based on such criteria as selected by the Committee, including, without limitation, criteria based on the Participant’s duration of employment, directorship or consultancy with the Company, individual, group, or divisional performance criteria, Company performance, or other criteria selected by the Committee. The Committee may make Restricted Share and RSU Awards with or without the requirement for payment of cash or other consideration. In addition, the Committee may grant Awards hereunder in the form of Unrestricted Shares which shall vest in full upon the Grant Date or such other date as the Committee may determine or which the Committee may issue pursuant to any program under which one or more Eligible Persons (selected by the Committee in its sole discretion) elect to pay for such Shares or to receive Unrestricted Shares in lieu of cash bonuses that would otherwise be paid.

(b) *Vesting and Forfeiture.* The Committee shall set forth, in an Award Agreement granting Restricted Shares or RSUs, the terms and conditions under which the Participant’s interest in the Restricted Shares or the Shares subject to RSUs will become vested and non-forfeitable. Except as set forth in the applicable Award Agreement or as the Committee otherwise determines, upon termination of a Participant’s Continuous Service for any reason, the Participant shall forfeit his or her Restricted Shares and RSUs to the extent the Participant’s interest therein has not vested on or before such termination date; provided that if a Participant purchases Restricted Shares and forfeits them for any reason, the Company shall return the purchase price to the Participant to the extent either set forth in an Award Agreement or required by Applicable Laws.

(c) *Certificates for Restricted Shares.* Unless otherwise provided in an Award Agreement, the Company shall hold certificates representing Restricted Shares and dividends (whether in Shares or cash) that accrue with respect to them until the restrictions lapse, and the Participant shall provide the Company with appropriate stock powers endorsed in blank. The Participant’s failure to provide such stock powers within ten days after a written request from the Company shall entitle the Committee to unilaterally declare a forfeiture of all or some of the Participant’s Restricted Shares.

(d) *Section 83(b) Elections.* A Participant may make an election under Code Section 83(b) (the “Section 83(b) Election”) with respect to Restricted Shares. A Participant who has received RSUs may, within ten days after receiving the RSU Award, provide the Committee with a written notice of his or her desire to make a Section 83(b) Election with respect to the Shares subject to such RSUs. The Committee may in its discretion convert the Participant’s RSUs into Restricted Shares, on a one-for-one basis, in full satisfaction of the Participant’s RSU Award. The Participant may then make a Section 83(b) Election with respect to those Restricted Shares; provided that the Participant’s Section 83(b) Election will be invalid if not filed with the Company and the appropriate U.S. tax authorities within 30 days after the Grant Date of the RSUs that are thereafter replaced by the Restricted Shares.

(e) *Deferral Elections for RSUs.* To the extent specifically provided in an Award Agreement, a Participant may irrevocably elect, in accordance with Section 8 below, to defer the receipt of all or a

percentage of the Shares that would otherwise be transferred to the Participant both more than 12 months after the date of the Participant's deferral election and upon the vesting of an RSU Award. If the Participant makes this election, the Company shall credit the Shares subject to the election, and any associated Shares attributable to Dividend Equivalent Rights attached to the Award, to a DSU account established pursuant to Section 8 below on the date such Shares would otherwise have been delivered to the Participant pursuant to this Section.

(f) *Issuance of Shares upon Vesting.* As soon as practicable after vesting of a Participant's Restricted Shares (or of the right to receive Shares underlying RSUs), the Company shall deliver to the Participant, free from vesting restrictions, one Share for each surrendered and vested Restricted Share (or deliver one Share free of the vesting restriction for each vested RSU), unless an Award Agreement provides otherwise and subject to Section 11 regarding Withholding Taxes. No fractional Shares shall be distributed, and cash shall be paid in lieu thereof.

8. **DSUs.**

(a) *Elections to Defer.* The Committee may make DSU awards to Eligible Persons pursuant to Award Agreements (regardless of whether or not there is a deferral of the Eligible Person's compensation), and may permit select Eligible Persons to irrevocably elect, on a form provided by and acceptable to the Committee (the "Election Form"), to forego the receipt of cash or other compensation (including the Shares deliverable pursuant to any RSU Award) and in lieu thereof to have the Company credit to an internal Plan account a number of DSUs having a Fair Market Value equal to the Shares and other compensation deferred. These credits will be made at the end of each calendar quarter (or other period determined by the Committee) during which compensation is deferred. Notwithstanding the foregoing sentence, a Participant's Election Form will be ineffective with respect to any compensation that the Participant earns before the date on which the Election Form takes effect. For any Participant who is subject to U.S. income taxation, the Committee shall only authorize deferral elections under this Section (i) pursuant to written procedures, and using written Election Forms, that satisfy the requirements of Code Section 409A, and (ii) only by Eligible Persons who are Directors, Consultants, or members of a select group of management or highly compensated Employees (within the meaning of ERISA).

(b) *Vesting.* Unless an Award Agreement expressly provides otherwise, each Participant shall be 100% vested at all times in any Shares subject to DSUs.

(c) *Issuances of Shares.* Unless an Award Agreement expressly provides otherwise, the Company shall settle a Participant's DSU Award, by delivering one Share for each DSU, in five substantially equal annual installments that are issued before the last day of each of the five calendar years that end after the date on which the Participant's Continuous Service ends for any reason, subject to –

(i) the Participant's right to elect a different form of distribution, only on a form provided by and acceptable to the Committee, that permits the Participant to select any combination of a lump sum and annual installments that are triggered by, and completed within ten years following, the last day of the Participant's Continuous Service, and

(ii) the Company's acceptance of the Participant's distribution election form executed at the time the Participant elects to defer the receipt of cash or other compensation pursuant to Section 8(a), provided that the Participant may change a distribution election through any subsequent election that (A) the Participant delivers to the Company at least one year before the date on which distributions are otherwise scheduled to commence pursuant to the Participant's initial distribution election, and (B) defers the commencement of distributions by at least five years from the originally scheduled distribution commencement date.

Fractional shares shall not be issued, and instead shall be paid out in cash.

(d) *Emergency Withdrawals.* In the event that a Participant suffers an unforeseeable emergency within the contemplation of this Section, the Participant may apply to the Committee for an immediate distribution of all or a portion of the Participant's DSUs. The unforeseeable emergency must result from a sudden and unexpected illness or accident of the Participant, the Participant's spouse, or a dependent (within the meaning of Code Section 152) of the Participant, casualty loss of the Participant's property, or other similar extraordinary and unforeseeable conditions beyond the control of the Participant. The Committee shall, in its sole and absolute discretion, determine whether a Participant has a qualifying unforeseeable emergency, may require independent verification of the emergency, and may determine whether or not to provide the Participant with cash or Shares. Examples of purposes which are not considered unforeseeable emergencies include post-secondary school expenses or the desire to purchase a residence. In no event will a distribution be made to the extent the unforeseeable emergency could be relieved through reimbursement or compensation by insurance or otherwise, or by liquidation of the Participant's nonessential assets to the extent such liquidation would not itself cause a severe financial hardship. The amount of any distribution hereunder shall be limited to the amount necessary to relieve the Participant's unforeseeable emergency plus amounts necessary to pay taxes reasonably anticipated as a result of the distribution. The number of Shares subject to the Participant's DSU Award shall be reduced by any Shares distributed to the Participant and by a number of Shares having a Fair Market Value on the date of the distribution equal to any cash paid to the Participant pursuant to this Section. For all DSUs granted to Participants who are U.S. taxpayers, the term "unforeseeable emergency" shall be interpreted in accordance with Code Section 409A.

(e) *Termination of Service.* For purposes of this Section, a Participant's "Continuous Service" shall only end when the Participant incurs a "separation from service" within the meaning of Treasury Regulations § 1.409A-1(h). A Participant shall be considered to have experienced a termination of Continuous Service when the facts and circumstances indicate that either (i) no further services will be performed for the Company or any Affiliate after a certain date, or (ii) that the level of bona fide services the Participant will perform after such date (whether as an Employee, Director, or Consultant) are reasonably expected to permanently decrease to no more than 50% of the average level of bona fide services performed by such Participant (whether as an Employee, Director, or Consultant) over the immediately preceding 36-month period (or full period of services to the Company and its Affiliates if the Participant has been providing such services for less than 36 months).

9. Performance and Cash-Settled Awards.

(a) *Performance Units.* Subject to the limitations set forth in paragraph (b) hereof, the Committee may in its discretion grant Performance Awards, including Performance Units to any Eligible Person, including Performance Unit Awards that (i) have substantially the same financial benefits and other terms and conditions as Options, SARs, RSUs, or DSUs, but (ii) are settled only in cash. All Awards hereunder shall be made pursuant to Award Agreements setting forth terms and conditions that are not inconsistent with the Plan.

(b) *Performance Compensation Awards.* Subject to the limitations set forth in this Section, the Committee may, at the time of grant of a Performance Unit, designate such Award as a "Performance Compensation Award" (payable in cash or Shares) in order that such Award constitutes "qualified performance-based compensation" under Code Section 162(m), and has terms and conditions designed to qualify as such. With respect to each such Performance Compensation Award, the Committee shall establish, in writing within the time required under Code Section 162(m), a "Performance Period," "Performance Measure(s)", and "Performance Formula(e)" (each such term being defined below). Once established for a Performance Period, the Performance Measure(s) and Performance Formula(e) shall not be amended or otherwise modified to the extent such amendment or modification would cause the compensation payable pursuant to the Award to fail to constitute qualified performance-based compensation under Code Section 162(m).

A Participant shall be eligible to receive payment in respect of a Performance Compensation Award only to the extent that the Performance Measure(s) for such Award is achieved and the Performance Formula(e) as applied against such Performance Measure(s) determines that all or some portion of such Participant's Award has been earned for the Performance Period. As soon as practicable after the close of each Performance Period, the Committee shall review and certify in writing whether, and to what extent, the Performance Measure(s) for the Performance Period have been achieved and, if so, determine and certify in writing the amount of the Performance Compensation Award to be paid to the Participant and, in so doing, may use negative discretion to decrease, but not increase, the amount of the Award otherwise payable to the Participant based upon such performance

(c) *Limitations on Awards.* The maximum Performance Award and the maximum Performance Compensation Award that any one Participant may receive for any one Performance Period, without regard to time of vesting or exercisability, shall not together exceed the limitation set forth in Section 3(b) above, as adjusted pursuant to Section 13 below (or, for Performance Units to be settled in cash, U.S. \$2,000,000 determined on the Grant Date). The Committee shall have the discretion to provide in any Award Agreement that any amounts earned in excess of these limitations will be credited as DSUs or as deferred cash compensation under a separate plan of the Company (provided in the latter case that such deferred compensation either bears a reasonable rate of interest or has a value based on one or more predetermined actual investments). Any amounts for which payment to the Participant is deferred pursuant to the preceding sentence shall be paid to the Participant in a future year or years not earlier than, and only to the extent that, the Participant is either not receiving compensation in excess of these limits for a Performance Period, or is not subject to the restrictions set forth under Code Section 162(b).

(d) *Definitions.*

(i) “Performance Formula” means, for a Performance Period, one or more objective formulas or standards established by the Committee for purposes of determining whether or the extent to which an Award has been earned based on the level of performance attained or to be attained with respect to one or more Performance Measure(s). Performance Formulae may vary from Performance Period to Performance Period and from Participant to Participant and may be established on a stand-alone basis, in tandem or in the alternative.

(ii) “Performance Measure” means one or more of the following selected by the Committee to measure Company, Affiliate, and/or business unit performance for a Performance Period, whether in absolute or relative terms (including, without limitation, terms relative to a peer group or index): basic, diluted, or adjusted earnings per share; sales or revenue; earnings before interest, taxes, and other adjustments (in total or on a per share basis); basic or adjusted net income; returns on equity, assets, capital, revenue or similar measure; economic value added; working capital; total stockholder return; and product development, product market share, research, licensing, litigation, human resources, information services, mergers, acquisitions, sales of assets of Affiliates or business units. Each such measure shall be, to the extent applicable, determined in accordance with generally accepted accounting principles as consistently applied by the Company (or such other standard applied by the Committee) and, if so determined by the Committee, and in the case of a Performance Compensation Award, to the extent permitted under Code Section 162(m), adjusted to omit the effects of extraordinary items, gain or loss on the disposal of a business segment, unusual or infrequently occurring events and transactions and cumulative effects of changes in accounting principles. Performance Measures may vary from Performance Period to Performance Period and from Participant to Participant, and may be established on a stand-alone basis, in tandem or in the alternative.

(iii) “Performance Period” means one or more periods of time (of not less than one fiscal year of the Company), as the Committee may designate, over which the attainment of one or more Performance Measure(s) will be measured for the purpose of determining a Participant’s rights in respect of an Award.

(e) *Deferral Elections.* At any time prior to the date that is both at least six months before the close of a Performance Period (or shorter or longer period that the Committee selects) with respect to a Performance Award and at which time vesting or payment is substantially uncertain to occur, the Committee may permit a Participant who is a member of a select group of management or highly compensated employees (within the meaning of ERISA) to irrevocably elect, on a form provided by and acceptable to the Committee, to defer the receipt of all or a percentage of the cash or Shares that would otherwise be transferred to the Participant upon the vesting of such Award. If the Participant makes this election, the cash or Shares subject to the election, and any associated interest and dividends, shall be credited to an account established pursuant to Section 8 hereof on the date such cash or Shares would otherwise have been released or issued to the Participant pursuant to this Section.

10. **Dividend Equivalent Rights.** The Committee may grant Dividend Equivalent Rights to any Eligible Person, and may do either pursuant to an Award Agreement that is independent of any other

Award, or through a provision in another Award (other than an Option or SAR) that Dividend Equivalent Rights attach to the Shares underlying the Award. For example, and without limitation, the Committee may grant a Dividend Equivalent Right in respect of each Share subject to a Restricted Stock Award, Restricted Stock Unit Award, Deferred Share Unit, or Performance Share Award.

(a) *Nature of Right.* Each Dividend Equivalent Right shall represent the right to receive amounts based on the dividends declared on Shares as of all dividend payment dates during the term of the Dividend Equivalent Right as determined by the Committee. Unless otherwise determined by the Committee, a Dividend Equivalent Right shall expire upon termination of the Participant's Continuous Service, provided that a Dividend Equivalent Right that is granted as part of another Award shall expire only when the Award is settled or otherwise forfeited.

(b) *Settlement.* Unless otherwise provided in an Award Agreement, Dividend Equivalent Rights shall be paid out on the (i) on the record date for dividends if the Award occurs on a stand-alone basis, and (ii) on the vesting or later settlement date for another Award if the Dividend Equivalent Right is granted as part of it. Payment of all amounts determined in accordance with this Section shall be in Shares, with cash paid in lieu of fractional Shares, provided that the Committee may instead provide in an Award Agreement for cash settlement of all or part of the Dividend Equivalent Rights. Only the Shares actually issued pursuant to Dividend Equivalent Rights shall count against the limits set forth in Section 3 above.

(c) *Other Terms.* The Committee may impose such other terms and conditions on the grant of a Dividend Equivalent Right as it deems appropriate in its discretion as reflected by the terms of the Award Agreement. The Committee may establish a program under which Dividend Equivalent Rights may be granted in conjunction with other Awards. The Committee may also authorize, for any Participant or group of Participants, a program under which the payments with respect to Dividend Equivalent Rights may be deferred pursuant to the terms and conditions determined under Section 9 above.

11. **Taxes; Withholding.**

(a) *General Rule.* Participants are solely responsible and liable for the satisfaction of all taxes and penalties that may arise in connection with Awards, and neither the Company, nor any Affiliate, nor any of their employees, directors, or agents shall have any obligation to mitigate, indemnify, or to otherwise hold any Participant harmless from any or all of such taxes. The Company's obligation to deliver Shares (or to pay cash) to Participants pursuant to Awards is at all times subject to their prior or coincident satisfaction of all required Withholding Taxes. Except to the extent otherwise either provided in an Award Agreement or thereafter authorized by the Committee, the Company or any Affiliate will satisfy required Withholding Taxes that the Participant has not otherwise arranged to settle before the due date thereof –

- (i) first from withholding the cash otherwise payable to the Participant pursuant to the Award;
- (ii) then by withholding and cancelling the Participant's rights with respect to a number of Shares that (A) would otherwise have been delivered to the Participant pursuant to the Award, and (B) have an aggregate Fair Market

Value equal to the Withholding Taxes (such withheld Shares to be valued on the basis of the aggregate Fair Market Value thereof on the date of the withholding); and

(iii) finally, withholding the cash otherwise payable to the Participant by the Company.

The number of Shares withheld and cancelled to pay a Participant's Withholding Taxes will be rounded up to the nearest whole Share sufficient to satisfy such taxes, with cash being paid to the Participant in an amount equal to the amount by which the Fair Market Value of such Shares exceeds the Withholding Taxes.

(b) *U.S. Code Section 409A.* To the extent that the Committee determines that any Award granted under the Plan is subject to Code Section 409A, the Award Agreement evidencing such Award shall incorporate the terms and conditions required by Code Section 409A. To the extent applicable, the Plan and Award Agreements shall be interpreted in accordance with Code Section 409A and Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Effective Date. Notwithstanding any provision of the Plan to the contrary, the Committee may adopt such amendments to the Plan and the applicable Award Agreement or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, that the Committee determines are necessary or appropriate (i) to exempt the Award from Code Section 409A and/or preserve the intended tax treatment of the benefits provided with respect to the Award, or (ii) to comply with the requirements of Code Section 409A and related Department of Treasury guidance and thereby avoid the application of any penalty taxes under such Section.

(c) *Unfunded Tax Status.* The Plan is intended to be an "unfunded" plan for incentive compensation. With respect to any payments not yet made to a Person pursuant to an Award, nothing contained in the Plan or any Award Agreement shall give the Person any rights that are greater than those of a general creditor of the Company or any Affiliate, and a Participant's rights under the Plan at all times constitute an unsecured claim against the general assets of the Company for the collection of benefits as they come due. Neither the Participant nor the Participant's duly-authorized transferee or Beneficiaries shall have any claim against or rights in any specific assets, Shares, or other funds of the Company.

12. **Non-Transferability of Awards.**

(a) *General.* Except as set forth in this Section, or as otherwise approved by the Committee, Awards may not be sold, pledged, assigned, hypothecated, transferred or disposed of in any manner other than by will or by the laws of descent or distribution. The designation of a death Beneficiary by a Participant will not constitute a transfer. An Award may be exercised, during the lifetime of the holder of an Award, only by such holder, by the duly-authorized legal representative of a holder who is Disabled, or by a transferee permitted by this Section.

(b) *Limited Transferability Rights.* The Committee may in its discretion provide in an Award Agreement that an Award in the form of a Non-ISO, Share-settled SAR, Restricted Shares, or Performance Shares may be transferred, on such terms and conditions as the Committee deems

appropriate, either (i) by instrument to the Participant's "Immediate Family" (as defined below), (ii) by instrument to an inter vivos or testamentary trust (or other entity) in which the Award is to be passed to the Participant's designated beneficiaries, or (iii) by gift to charitable institutions. Any transferee of the Participant's rights shall succeed and be subject to all of the terms of the applicable Award Agreement and the Plan. "Immediate Family," means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, and shall include adoptive relationships.

(c) *Death*. In the event of the death of a Participant, any outstanding Awards issued to the Participant shall automatically be transferred to the Participant's Beneficiary (or, if no Beneficiary is designated or surviving, to the person or persons to whom the Participant's rights under the Award pass by will or the laws of descent and distribution).

13. **Change in Capital Structure; Change in Control; Etc.**

(a) *Changes in Capitalization*. The Committee shall equitably adjust the number of Shares covered by each outstanding Award, and the number of Shares that have been authorized for issuance under the Plan but as to which no Awards have yet been granted or that have been returned to the Plan upon cancellation, forfeiture, or expiration of an Award, as well as the exercise or other price per Share covered by each such outstanding Award, to reflect any increase or decrease in the number of issued Shares resulting from a stock-split, reverse stock-split, stock dividend, combination, recapitalization or reclassification of the Shares, merger, consolidation, change in organization form, or any other increase or decrease in the number of issued Shares effected without receipt of consideration by the Company. In the event of any such transaction or event, the Committee may provide in substitution for any or all outstanding Awards such alternative consideration (including cash or securities of any surviving entity) as it may in good faith determine to be equitable under the circumstances and may require in connection therewith the surrender of all Awards so replaced. In any case, such substitution of cash or securities shall not require the consent of any person who is granted Awards pursuant to the Plan. Except as expressly provided herein, or in an Award Agreement, if the Company issues for consideration shares of stock of any class or securities convertible into shares of stock of any class, the issuance shall not affect, and no adjustment by reason thereof shall be required to be made with respect to the number or price of Shares subject to any Award.

(b) *Dissolution or Liquidation*. In the event of the dissolution or liquidation of the Company other than as part of a Change of Control, each Award will terminate immediately prior to the consummation of such dissolution or liquidation, subject to the ability of the Committee to exercise any discretion authorized in the case of a Change in Control.

(c) *Change in Control*. In the event of a Change in Control but subject to the terms of any Award Agreements or employment-related agreements between the Company or any Affiliates and any Participant, each outstanding Award shall be assumed or a substantially equivalent award shall be substituted by the surviving or successor company or a parent or subsidiary of such successor company (in each case, the "Successor Company") upon consummation of the transaction. Notwithstanding the foregoing, instead of having outstanding Awards be assumed or replaced with equivalent awards by the Successor Company, the Committee may in its sole and absolute discretion and authority, without obtaining the approval or consent of the Company's stockholders or any

Participant with respect to his or her outstanding Awards, take one or more of the following actions (with respect to any or all of the Awards, and with discretion to differentiate between individual Participants and Awards for any reason):

- (i) accelerate the vesting of Awards so that Awards shall vest (and, to the extent applicable, become exercisable) as to the Shares that otherwise would have been unvested and provide that repurchase rights of the Company with respect to Shares issued pursuant to an Award shall lapse as to the Shares subject to such repurchase right;
- (ii) arrange or otherwise provide for the payment of cash or other consideration to Participants in exchange for the satisfaction and cancellation of outstanding Awards (with the Committee determining the amount payable to each Participant based on the Fair Market Value, on the date of the Change in Control, of the Award being cancelled, based on any reasonable valuation method selected by the Committee);
- (iii) terminate all or some Awards upon the consummation of the transaction, provided that the Committee shall provide for vesting of such Awards in full as of a date immediately prior to consummation of the Change in Control. To the extent that an Award is not exercised prior to consummation of a transaction in which the Award is not being assumed or substituted, such Award shall terminate upon such consummation;
- (iv) make such other modifications, adjustments or amendments to outstanding Awards or this Plan as the Committee deems necessary or appropriate, subject however to the terms of Section 13 above.

Unless otherwise expressly provided in an Award Agreement or in any employment-related agreement between the Company or any Affiliate and the Participant, in the event a Participant is Involuntarily Terminated on or within 12 months (or other period set forth in an Award Agreement) following a Change in Control, then any Award that is assumed or substituted pursuant to this Section shall accelerate and become fully vested (and become exercisable in full in the case of Options and SARs), and any repurchase right applicable to any Shares underlying the Award shall lapse in full. The acceleration of vesting and lapse of repurchase rights provided for in the previous sentence shall occur immediately prior to the effective date of the Participant's Involuntary Termination.

14. Termination, Rescission and Recapture of Awards.

(a) Each Award under the Plan is intended to align the Participant's long-term interests with those of the Company. Accordingly, to the extent provided in an Award Agreement, the Company may terminate any outstanding, unexercised, unexpired, unpaid, or deferred Awards ("Termination"), rescind any exercise, payment or delivery pursuant to the Award ("Rescission"), or recapture any Shares (whether restricted or unrestricted) or proceeds from the Participant's sale of Shares issued pursuant to the Award ("Recapture"), if the Participant does not comply with the conditions of subsections (b), (c), and (e) hereof (collectively, the "Conditions").

(b) A Participant shall not, without the Company's prior written authorization, disclose to anyone outside the Company, or use in other than the Company's business, any proprietary or confidential information or material, as those or other similar terms are used in any applicable patent, confidentiality, inventions, secrecy, or other agreement between the Participant and the Company with regard to any such proprietary or confidential information or material.

(c) Pursuant to any agreement between the Participant and the Company with regard to intellectual property (including but not limited to patents, trademarks, copyrights, trade secrets, inventions, developments, improvements, proprietary information, confidential business and personnel information), a Participant shall promptly disclose and assign to the Company or its designee all right, title, and interest in such intellectual property, and shall take all reasonable steps necessary to enable the Company to secure all right, title and interest in such intellectual property in the United States and in any foreign country.

(d) Upon exercise, payment, or delivery of cash or Common Stock pursuant to an Award, the Participant shall certify on a form acceptable to the Company that he or she is in compliance with the terms and conditions of the Plan and, if a severance of Continuous Service has occurred for any reason, shall state the name and address of the Participant's then-current employer or any entity for which the Participant performs business services and the Participant's title, and shall identify any organization or business in which the Participant owns a greater-than-five-percent equity interest.

(e) If the Company determines, in its sole and absolute discretion, that (i) a Participant has violated any of the Conditions or (ii) during his or her Continuous Service, or within one year after its termination for any reason, a Participant (x) has rendered services to or otherwise directly or indirectly engaged in or assisted, any organization or business that, in the judgment of the Company in its sole and absolute discretion, is or is working to become competitive with the Company; (y) has solicited any non-administrative employee of the Company to terminate employment with the Company; or (z) has engaged in activities which are materially prejudicial to or in conflict with the interests of the Company, including any breaches of fiduciary duty or the duty of loyalty, then the Company may, in its sole and absolute discretion, impose a Termination, Rescission, and/or Recapture with respect to any or all of the Participant's relevant Awards, Shares, and the proceeds thereof.

(f) Within ten days after receiving notice from the Company of any such activity described in Section 14(e) above, the Participant shall deliver to the Company the Shares acquired pursuant to the Award, or, if Participant has sold the Shares, the gain realized, or payment received as a result of the rescinded exercise, payment, or delivery; provided, that if the Participant returns Shares that the Participant purchased pursuant to the exercise of an Option (or the gains realized from the sale of such Common Stock), the Company shall promptly refund the exercise price, without earnings, that the Participant paid for the Shares. Any payment by the Participant to the Company pursuant to this Section shall be made either in cash or by returning to the Company the number of Shares that the Participant received in connection with the rescinded exercise, payment, or delivery. It shall not be a basis for Termination, Rescission or Recapture if after termination of a Participant's Continuous Service, the Participant purchases, as an investment or otherwise, stock or other securities of such an organization or business, so long as (i) such stock or other securities are listed upon a recognized securities exchange or traded over-the-counter, and (ii) such investment does not represent more than a five percent (5%) equity interest in the organization or business.

(g) Notwithstanding the foregoing provisions of this Section, the Company has sole and absolute discretion not to require Termination, Rescission and/or Recapture, and its determination

not to require Termination, Rescission and/or Recapture with respect to any particular act by a particular Participant or Award shall not in any way reduce or eliminate the Company's authority to require Termination, Rescission and/or Recapture with respect to any other act or Participant or Award. Nothing in this Section shall be construed to impose obligations on the Participant to refrain from engaging in lawful competition with the Company after the termination of employment that does not violate subsections (b), (c), or (e) of this Section, other than any obligations that are part of any separate agreement between the Company and the Participant or that arise under Applicable Law.

(h) All administrative and discretionary authority given to the Company under this Section shall be exercised by the most senior human resources executive of the Company or such other person or committee (including without limitation the Committee) as the Committee may designate from time to time.

(i) If any provision within this Section is determined to be unenforceable or invalid under any Applicable Law, such provision will be applied to the maximum extent permitted by Applicable Law, and shall automatically be deemed amended in a manner consistent with its objectives and any limitations required under Applicable Law. Notwithstanding the foregoing, but subject to any contrary terms set forth in any Award Agreement, this Section shall not be applicable to any Participant from and after his or her termination of Continuous Service after a Change in Control.

15. **Recoupment of Awards.** Unless otherwise specifically provided in an Award Agreement, and to the extent permitted by Applicable Law, the Committee may in its sole and absolute discretion, without obtaining the approval or consent of the Company's stockholders or of any Participant, require that any Participant reimburse the Company for all or any portion of any Awards granted under this Plan ("Reimbursement"), or the Committee may require the Termination or Rescission of, or the Recapture associated with, any Award, if and to the extent—

(a) the granting, vesting, or payment of such Award was predicated upon the achievement of certain financial results that were subsequently the subject of a material financial restatement;

(b) in the Committee's view the Participant either benefited from a calculation that later proves to be materially inaccurate, or engaged in fraud or misconduct that caused or partially caused the need for a material financial restatement by the Company or any Affiliate; and

(c) a lower granting, vesting, or payment of such Award would have occurred based upon the conduct described in clause (b) of this Section.

In each instance, the Committee will, to the extent practicable and allowable under Applicable Laws, require Reimbursement, Termination or Rescission of, or Recapture relating to, any such Award granted to a Participant; provided that the Company will not seek Reimbursement, Termination or Rescission of, or Recapture relating to, any such Awards that were paid or vested more than three years prior to the first date of the applicable restatement period.

16. **Relationship to other Benefits.** No payment pursuant to the Plan shall be taken into account in determining any benefits under any pension, retirement, savings, profit sharing, group insurance, welfare or other benefit plan of the Company or any Affiliate except to the extent otherwise expressly provided in writing in such other plan or an agreement thereunder.

17. **Administration of the Plan.** The Committee shall administer the Plan in accordance with its terms, provided that the Board may act in lieu of the Committee on any matter. The Committee shall hold meetings at such times and places as it may determine and may prescribe, amend, and rescind such rules, regulations, and procedures for the conduct of its business as it deems advisable. In the absence of a duly appointed Committee, the Board shall function as the Committee for all purposes of the Plan.

(a) *Committee Composition.* The Board shall appoint the members of the Committee. If and to the extent permitted by Applicable Law, the Committee may authorize one or more executive officers to make Awards to Eligible Persons other than themselves. The Board may at any time appoint additional members to the Committee, remove and replace members of the Committee with or without Cause, and fill vacancies on the Committee however caused.

(b) *Powers of the Committee.* Subject to the provisions of the Plan, the Committee shall have the authority, in its sole discretion:

(i) to grant Awards and to determine Eligible Persons to whom Awards shall be granted from time to time, and the number of Shares, units, or dollars to be covered by each Award;

(ii) to determine, from time to time, the Fair Market Value of Shares;

(iii) to determine, and to set forth in Award Agreements, the terms and conditions of all Awards, including any applicable exercise or purchase price, the installments and conditions under which an Award shall become vested (which may be based on performance), terminated, expired, cancelled, or replaced, and the circumstances for vesting acceleration or waiver of forfeiture restrictions, and other restrictions and limitations;

(iv) to approve the forms of Award Agreements and all other documents, notices and certificates in connection therewith which need not be identical either as to type of Award or among Participants;

(v) to construe and interpret the terms of the Plan and any Award Agreement, to determine the meaning of their terms, and to prescribe, amend, and rescind rules and procedures relating to the Plan and its administration;

(vi) to the extent consistent with the purposes of the Plan and without amending the Plan, to modify, to cancel, or to waive the Company's rights with respect to any Awards, to adjust or to modify Award Agreements for changes in Applicable Law, and to recognize differences in foreign law, tax policies, or customs;

(vii) to require, as a condition precedent to the grant, vesting, exercise, settlement, and/or issuance of Shares pursuant to any Award, that a Participant agree to execute a general release of claims (in any form that the Committee may require, in its sole discretion, which form may include any other provisions, *e.g.* confidentiality and restrictions on competition, that are found in general claims release agreements that the Company utilizes or expects to utilize);

(viii) in the event that the Company establishes, for itself or using the services of a third party, an automated system for the documentation, granting, settlement, or exercise of Award, such as a system using an internet website or interactive voice response, to implement paperless documentation, granting, settlement, or exercise of Awards by a Participant may be permitted through the use of such an automated system; and

(ix) to make all interpretations and to take all other actions that the Committee may consider necessary or advisable to administer the Plan or to effectuate its purposes.

Subject to Applicable Law and the restrictions set forth in the Plan, the Committee may delegate administrative functions to individuals who are Directors or Employees.

(d) *Local Law Adjustments and Sub-plans.* To facilitate the making of any grant of an Award under this Plan, the Committee may adopt rules and provide for such special terms for Awards to Participants who are located within the United States, foreign nationals, or who are employed by the Company or any Affiliate outside of the United States of America as the Committee may consider necessary or appropriate to accommodate differences in local law, tax policy or custom. Without limiting the foregoing, the Company is specifically authorized to adopt rules and procedures regarding the conversion of local currency, taxes, withholding procedures and handling of stock certificates which vary with the customs and requirements of particular countries. The Company may adopt sub-plans and establish escrow accounts and trusts, and settle Awards in cash in lieu of shares, as may be appropriate, required or applicable to particular locations and countries.

(c) *Action by Committee.* Unless otherwise established by the Board or in any charter of the Committee, a majority of the Committee shall constitute a quorum and the acts of a majority of the members present at any meeting at which a quorum is present, and acts approved in writing by all members of the Committee in lieu of a meeting, shall be deemed the acts of the Committee. Each member of the Committee is entitled to, in good faith, rely or act upon any report or other information furnished to that member by an officer or other employee of the Company or any Affiliate, the Company's independent certified public accounts, or any executive compensation consultant or other professional retained by the Company to assist in the administration of the Plan.

(d) *Deference to Committee Determinations.* The Committee shall have the discretion to interpret or construe ambiguous, unclear, or implied (but omitted) terms in any fashion it deems to be appropriate in its sole discretion, and to make any findings of fact needed in the administration of the Plan or Award Agreements. The Committee's prior exercise of its discretionary authority shall not obligate it to exercise its authority in a like fashion thereafter. The Committee's interpretation and construction of any provision of the Plan, or of any Award or Award Agreement, and all determination the Committee makes pursuant to the Plan shall be final, binding, and conclusive. The validity of any such interpretation, construction, decision or finding of fact shall not be given de novo review if challenged in court, by arbitration, or in any other forum, and shall be upheld unless clearly made in bad faith or materially affected by fraud.

(e) *No Liability; Indemnification.* Neither the Board nor any Committee member, nor any Person acting at the direction of the Board or the Committee, shall be liable for any act, omission, interpretation, construction or determination made in good faith with respect to the Plan, any Award or any Award Agreement. The Company and its Affiliates shall pay or reimburse any member of the

Committee, as well as any Director, Employee, or Consultant who in good faith takes action on behalf of the Plan, for all expenses incurred with respect to the Plan, and to the full extent allowable under Applicable Law shall indemnify each and every one of them for any claims, liabilities, and costs (including reasonable attorney's fees) arising out of their good faith performance of duties on behalf of the Plan. The Company and its Affiliates may, but shall not be required to, obtain liability insurance for this purpose.

(f) *Expenses.* The expenses of administering the Plan shall be borne jointly and severally by the Company and its Affiliates.

18. **Modification of Awards and Substitution of Options.** Within the limitations of the Plan, the Committee may modify an Award to accelerate the rate at which an Option or SAR may be exercised, to accelerate the vesting of any Award, to extend or renew outstanding Awards, to accept the cancellation of outstanding Awards to the extent not previously exercised, or to make any change that the Plan would permit for a new Award. However, except in connection with a Change in Control or as approved by the Company's stockholders for any period during which it is subject to the reporting requirements of the Exchange Act, the Committee may not cancel an outstanding Option or SAR whose exercise price is greater than Fair Market Value at the time of cancellation for the purpose of reissuing the Option or SAR to the Participant at a lower exercise price, or granting a replacement award of a different type, or otherwise allowing for a "repricing" within the meaning of applicable federal securities laws. Notwithstanding the foregoing, no modification of an outstanding Award may materially and adversely affect a Participant's rights thereunder unless either (i) the Participant provides written consent to the modification, or (ii) before a Change in Control, the Committee determines in good faith that the modification is not materially adverse to the Participant.

19. **Plan Amendment and Termination.** The Board may amend or terminate the Plan as it shall deem advisable; provided that no change shall be made that increases the total number of Shares reserved for issuance pursuant to Awards (except pursuant to Section 13 above) unless such change is authorized by the stockholders of the Company. A termination or amendment of the Plan shall not materially and adversely affect a Participant's vested rights under an Award previously granted to him or her, unless the Participant consents in writing to such termination or amendment. Notwithstanding the foregoing, the Committee may amend the Plan to comply with changes in tax or securities laws or regulations, or in the interpretation thereof. Furthermore, neither the Company nor the Committee shall, without stockholder approval, either (a) allow for a "repricing" within the meaning of federal securities laws applicable to proxy statement disclosures, or (b) cancel an outstanding Option whose exercise price is greater than Fair Market Value at the time of cancellation for the purpose of reissuing the Option to the Participant at a lower exercise price or granting a replacement award of a different type.

20. **Term of Plan.** If not sooner terminated by the Board, this Plan shall terminate at the close of business on the date ten years after its Effective Date as determined under Section 1(b) above. No Awards shall be made under the Plan after its termination.

21. **Governing Law.** The terms of this Plan shall be governed by the laws of the State of Delaware, within the United States of America, without regard to the State's conflict of laws rules.

22. **Laws and Regulations.**

(a) *General Rules.* This Plan, the granting of Awards, the exercise of Options and SARs, and the obligations of the Company hereunder (including those to pay cash or to deliver, sell or accept the surrender of any of its Shares or other securities) shall be subject to all Applicable Law. In the event that any Shares are not registered under any Applicable Law prior to the required delivery of them pursuant to Awards, the Company may require, as a condition to their issuance or delivery, that the persons to whom the Shares are to be issued or delivered make any written representations and warranties (such as that such Shares are being acquired by the Participant for investment for the Participant's own account and not with a view to, for resale in connection with, or with an intent of participating directly or indirectly in, any distribution of such Shares) that the Committee may reasonably require, and the Committee may in its sole discretion include a legend to such effect on the certificates representing any Shares issued or delivered pursuant to the Plan.

(b) *Black-out Periods.* Notwithstanding any contrary terms within the Plan or any Award Agreement, the Committee shall have the absolute discretion to impose a "blackout" period on the exercise of any Option or SAR, as well as the settlement of any Award, with respect to any or all Participants (including those whose Continuous Service has ended) to the extent that the Committee determines that doing so is either desirable or required in order to comply with applicable securities laws.

23. **No Stockholder Rights.** Neither a Participant nor any transferee or Beneficiary of a Participant shall have any rights as a stockholder of the Company with respect to any Shares underlying any Award until the date of issuance of a share certificate to such Participant, transferee, or Beneficiary for such Shares in accordance with the Company's governing instruments and Applicable Law. Prior to the issuance of Shares or Restricted Shares pursuant to an Award, a Participant shall not have the right to vote or to receive dividends or any other rights as a stockholder with respect to the Shares underlying the Award (unless otherwise provided in the Award Agreement for Restricted Shares), notwithstanding its exercise in the case of Options and SARs. No adjustment will be made for a dividend or other right that is determined based on a record date prior to the date the stock certificate is issued, except as otherwise specifically provided for in this Plan or an Award Agreement.

Appendix I: Definitions

As used in the Plan, the following terms have the meanings indicated when they begin with initial capital letters within the Plan:

"Affiliate" means, with respect to any Person, any other Person that directly or indirectly controls or is controlled by or under common control with such Person. For the purposes of this definition, "control," when used with respect to any Person, means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of such Person or the power to elect directors, whether through the ownership of voting securities, by contract or otherwise; and the terms "affiliated," "controlling" and "controlled" have meanings correlative to the foregoing.

“**Applicable Law**” means the legal requirements relating to the administration of options and share-based plans under any applicable laws of the United States, any other country, and any provincial, state, or local subdivision, any applicable stock exchange or automated quotation system rules or regulations, as such laws, rules, regulations and requirements shall be in place from time to time.

“**Award**” means any award made pursuant to the Plan, including awards made in the form of an Option, a SAR, a Restricted Share, a RSU, an Unrestricted Share, a DSU, a Performance Award, or Dividend Equivalent Rights, or any combination thereof, whether alternative or cumulative.

“**Award Agreement**” means any written document setting forth the terms of an Award that has been authorized by the Committee. The Committee shall determine the form or forms of documents to be used, and may change them from time to time for any reason.

“**Beneficiary**” means the person or entity designated by the Participant, in a form approved by the Company, to exercise the Participant’s rights with respect to an Award or receive payment or settlement under an Award after the Participant’s death.

“**Board**” means the Board of Directors of the Company.

“**Cause**” has the meaning set forth in any unexpired employment agreement between the Company and the Participant. In the absence of such an agreement, “Cause” means (i) gross negligence, willful misconduct, insubordination, or other material malfeasance or non-feasance by the Participant in the performance of his duties; (ii) the Participant’s unauthorized disclosure of confidential information about the Company; (iii) the Participant’s material breach of any employment, consulting, confidentiality, non-disclosure, non-competition or similar agreement between the Participant and the Company; (iv) the Participant’s conviction of, plea of *nolo contendere* to, or written admission of the commission of, a felony; (v) any act by the Participant involving fraud or misrepresentation with respect to his duties for the Company, which has resulted or likely will result in material damage to the Company; (vi) any act by the Participant constituting a failure to follow the directions of the either the Company’s Chief Executive Officer or the Board, provided that, the Board provides written notice of such failure to the Participant and the failure continues for fifteen (15) days after the Executive’s receipt of such notice; (vii) the Participant’s material breach of any provision of the Plan or any Award Agreement; (viii) any act of Participant involving moral turpitude that adversely affects Participant’s ability to serve the Company; (ix) Participant’s violation of any federal, state or local law or regulation applicable to the Company or its businesses that causes material injury to the Company (including, without limitation, the reputation of the Company) or Participant’s intentional or knowing violation of any law or regulation applicable to the Company; or (x) Participant’s conduct that constitutes a material breach of any statutory or common law duty of loyalty to the Company. For purpose of this paragraph, no act or failure to act by the Participant shall be considered “willful” if such act or failure to act was in good faith and with the reasonable belief that the act or omission was in the best interests of the Company, or occurred at the direction of the Board. The foregoing definition does not in any way limit the Company’s ability to terminate a Participant’s employment or consulting relationship at any time, and the term “Company” will be interpreted herein to include any Affiliate or successor thereto, if appropriate. Furthermore, a Participant’s Continuous Service shall be deemed to have terminated for Cause within the meaning hereof if, at any time (whether before, on, or after termination of the Participant’s Continuous Service), facts or circumstances are discovered that would have justified a termination for Cause.

“Change in Control” means, unless another definition is set forth in an Award Agreement, the first of the following to occur after the Effective Date:

(i) *Acquisition of Controlling Interest.* Any Person (other than Persons who are Employees at any time more than one year before a transaction) becomes the beneficial owner, directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company’s then outstanding securities. In applying the preceding sentence, (i) securities acquired from the Company by or for the Person shall not be taken into account, and (ii) an agreement to vote securities shall be disregarded unless its ultimate purpose is to cause what would otherwise be a Change in Control, as reasonably determined by the Board.

(ii) *Change in Board Control.* During any consecutive two-year period commencing after the date of adoption of this Plan, individuals who constituted the Board at the beginning of the period (or their approved replacements, as defined in the next sentence) cease for any reason to constitute a majority of the Board. A new Director shall be considered an “approved replacement” Director if his or her election (or nomination for election) was approved by a vote of at least a majority of the Directors then still in office who either were Directors at the beginning of the period or were themselves approved replacement Directors, but in either case excluding any Director whose initial assumption of office occurred as a result of an actual or threatened solicitation of proxies or consents by or on behalf of any Person other than the Board.

(iii) *Merger.* The Company consummates a merger, or consolidation of the Company with the any other corporation unless: (a) the voting securities of the Company outstanding immediately before the merger or consolidation would continue to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least 50% of the combined voting power of the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation; and (b) no Person (other than Persons who are Employees at any time more than one year before the transaction) becomes the Beneficial Owner, directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company’s then outstanding securities.

(iv) *Sale of Assets.* The stockholders of the Company approve an agreement for the sale or disposition by the Company of all, or substantially all, of the Company’s assets.

(v) *Liquidation or Dissolution.* The stockholders of the Company approve a plan or proposal for liquidation or dissolution of the Company.

Notwithstanding the foregoing, a “Change in Control” shall not be deemed to have occurred by virtue of the consummation of either (i) the Company’s initial public offering of its Shares, or (ii) any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in any entity which owns all or substantially all of the assets of the Company immediately following such transaction or series of transactions.

“**Code**” means the Internal Revenue Code of 1986, as amended.

“**Committee**” means the Compensation Committee of the Board or its successor, provided that the term “Committee” means (i) the Board when acting at any time in lieu of the Committee, (ii) with respect to any decision involving an Award intended to satisfy the requirements of Code Section 162(m), a committee consisting of two or more Directors of the Company who are “outside directors” within the meaning of Code Section 162(m), and (iii) with respect to any decision relating to a Reporting Person, a committee consisting of solely of two or more Directors who are disinterested within the meaning of Rule 16b-3.

“**Company**” means Gevo, Inc., a Delaware corporation; provided that in the event the Company reincorporates to another jurisdiction, all references to the term “Company” shall refer to the Company in such new jurisdiction.

“**Company Stock**” means common stock of the Company. In the event of a change in the capital structure of the Company affecting the common stock (as provided in Section 13), the Shares resulting from such a change in the common stock shall be deemed to be Company Stock within the meaning of the Plan.

“**Consultant**” means any person (other than an Employee or Director), including an advisor, who is engaged by the Company or any Affiliate to render services and is compensated for such services.

“**Continuous Service**” means a Participant’s period of service in the absence of any interruption or termination, as an Employee, Director, or Consultant. Continuous Service shall not be considered interrupted in the case of: (i) sick leave; (ii) military leave; (iii) any other leave of absence approved by the Committee, provided that such leave is for a period of not more than 90 days, unless reemployment upon the expiration of such leave is guaranteed by contract or statute, or unless provided otherwise pursuant to Company policy adopted from time to time; (iv) changes in status from Director to advisory director or emeritus status; or (v) transfers between locations of the Company or between the Company and its Affiliates. Changes in status between service as an Employee, Director, and a Consultant will not constitute an interruption of Continuous Service if the individual continues to perform bona fide services for the Company. The Committee shall have the discretion to determine whether and to what extent the vesting of any Awards shall be tolled during any paid or unpaid leave of absence; provided, however, that in the absence of such determination, vesting for all Awards shall be tolled during any such unpaid leave (but not for a paid leave). Notwithstanding anything to the contrary contained in the Plan, an Investor Director Provider shall be deemed to have Continuous Service for so long as the Investor Director Provider makes available for service as a member of the Board at least one individual who provides services to, owns equity interests in, or is otherwise employed by, such investor or any of its Affiliates.

“**Deferred Share Units**” or “**DSUs**” mean Awards pursuant to Section 8 of the Plan.

“Director” means a member of the Board, or a member of the board of directors of an Affiliate.

“Disabled” means (i) for an ISO, that the Participant is disabled within the meaning of Code section 22(e)(3), and (ii) for other Awards, a condition under which that the Participant –

(i) is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, or

(ii) is, by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, received income replacement benefits for a period of not less than three months under an accident or health plan covering employees of the Company.

“Dividend Equivalent Rights” means Awards pursuant to Section 10 of the Plan, which may be attached to other Awards.

“Eligible Person” means any Consultant, Director, Investor Director Provider, or Employee and includes non-Employees to whom an offer of employment has been or is being extended.

“Employee” means any person whom the Company or any Affiliate classifies as an employee (including an officer) for employment tax purposes, whether or not that classification is correct. The payment by the Company of a director’s fee to a Director shall not be sufficient to constitute “employment” of such Director by the Company.

“Employer” means the Company and each Subsidiary and Affiliate that employs one or more Participants.

“Exchange Act” means the Securities Exchange Act of 1934, as amended.

“Fair Market Value” means the fair market value of the Company Stock as of such date based on the then prevailing prices of the Company Stock on the New York Stock Exchange, the American Stock Exchange, NASDAQ or such other stocks exchange as the Company Stock is then listed for trading (and, if none, as determined by the Committee in good faith based on relevant facts and circumstances).

“Grant Date” means the later of (i) the date designated as the “Grant Date” within an Award Agreement, and (ii) date on which the Committee determines the key terms of an Award, provided that as soon as reasonably practical thereafter the Committee both notifies the Eligible Person of the Award and enters into an Award Agreement with the Eligible Person.

“Incentive Stock Option” (or **“ISO”**) means, an Option that qualifies for favorable income tax treatment under Code Section 422.

“Investor Director Provider” means any investor in the Company (or Affiliate of such investor) (a) an employee, direct or indirect owner or service provider of which serves as a Director and (b) with respect to which investor, such Director and such investor (or Affiliate) agree that the investor (or Affiliate) will receive any Awards that such Director otherwise would receive.

“Involuntary Termination” means termination of a Participant’s Continuous Service under the following circumstances occurring on or after a Change in Control:

(i) termination without Cause by the Company or an Affiliate or successor thereto, as appropriate; or

(ii) voluntary resignation by the Participant through the following actions: (1) the Participant provides the Company with written notice of the existence of one of the events, arising without the Participant’s consent, listed in clauses (A) through (C), below within thirty (30) days of the initial existence of such event; (2) the Company fails to cure such event within thirty (30) days following the date such notice is given; and (3) the Participant elects to voluntarily terminate employment within the ninety (90) day period immediately following such event. The events include: (A) a material reduction in the Participant’s authority, duties, and responsibilities, (B) the Participant being required to relocate his place of employment, other than a relocation within fifty (50) miles of the Participant’s principal work site at the time of the Change in Control, or (C) a material reduction in the Participant’s Base Salary other than any such reduction consistent with a general reduction of pay for similarly-situated Participants.

“Non-ISO” means an Option not intended to qualify as an Incentive Stock Option, as designated in the applicable Award Agreement.

“Option” means a right to purchase Company Stock granted under the Plan, at a price determined in accordance with the Plan.

“Participant” means any Eligible Person who holds an outstanding Award.

“Performance Awards” mean Awards granted pursuant to Section 9.

“Performance Unit” means an Award granted pursuant to Section 9(a) of the Plan which may be paid in cash, in Shares, or such combination of cash and Shares as the Committee in its sole discretion shall determine.

“Person” means any natural person, association, trust, business trust, cooperative, corporation, general partnership, joint venture, joint-stock company, limited partnership, limited liability company, real estate investment trust, regulatory body, governmental agency or instrumentality, unincorporated organization or organizational entity.

“Plan” means this Gevo, Inc. 2010 Stock Incentive Plan.

“Prior Plan” means the Gevo, Inc. 2006 Omnibus Securities and Incentive Plan.

“Recapture” and **“Rescission”** have the meaning set forth in Section 14 of the Plan.

“Reimbursement” has the meaning set forth in Section 15 of the Plan.

“Reporting Person” means an Employee, Director, or Consultant who is subject to the reporting requirements set forth under Rule 16b-3.

“Restricted Share” means a Share of Company Stock awarded with restrictions imposed under Section 7.

“Restricted Share Unit” or **“RSU”** means a right granted to a Participant to receive Shares or cash upon the lapse of restrictions imposed under Section 7.

“Retirement” means a Participant’s termination of employment after age 65.

“Rule 16b-3” means Rule 16b-3 promulgated under the Exchange Act, as amended from time to time, or any successor provision.

“Share” means a share of Common Stock of the Company, as adjusted in accordance with Section 13 of the Plan.

“SAR” or **“Share Appreciation Right”** means a right to receive amounts awarded under Section 6.

“Ten Percent Holder” means a person who owns (within the meaning of Code Section 422) stock representing more than ten percent (10%) of the combined voting power of all classes of stock of the Company.

“Unrestricted Shares” mean Shares (without restrictions) awarded pursuant to Section 7 of the Plan.

“Withholding Taxes” means the aggregate minimum amount of federal, state, local and foreign income, payroll and other taxes that the Company and any Affiliates are required to withhold in connection with any Award.

GEVO, INC.
2010 STOCK INCENTIVE PLAN

Restricted Shares Award Agreement

_____ [insert awardee's name] ("you") is hereby awarded Restricted Shares subject to the terms and conditions set forth in this agreement (the "Award Agreement" or "Award") and in the "Gevo, Inc. 2010 Stock Incentive Plan" ("Plan"). A copy of the Plan is attached as Exhibit A. A summary of the Plan appears in its Prospectus, which is attached as Exhibit B. You should carefully review these documents, and consult with your personal financial and legal advisors, before exercising this Award. This Award is conditioned on your execution of this Award Agreement [by [insert date]].

By executing this Award Agreement, you agree to be bound by all of the Plan's terms and conditions as if they had been set out verbatim below as well as this Award Agreement. In addition, you recognize and agree that all determinations, interpretations, or other actions respecting the Plan and this Award Agreement will be made by the Board of Directors (the "Board") of Gevo, Inc. (the "Company") or any Committee appointed by the Board to administer the Plan, and shall (in the absence of manifest bad faith or fraud) be final, conclusive and binding on all parties, including you and your successors in interest. Capitalized terms are defined in the Plan or in this Award Agreement.

1. **Specific Terms.** This portion of your Award is being granted pursuant to Section 7 of the Plan, and shall have the following terms:

Number of Shares Subject to Award	[insert number of restricted shares subject to award]
Purchase Price per Share (if applicable)	Not applicable.
Award Date	_____, 20__.
Vesting	At the rate of [__% on each of the next ____ [monthly] [quarterly] [annual]]anniversaries of the Award Date (each a " <u>Vesting Date</u> "); subject to acceleration as provided in the Plan and in the row immediately below, and to your Continuous Service not ending before the applicable Vesting Date (subject to the terms of any employment or other agreement between you and the Company and/or any Affiliate).
Accelerated Vesting	You will become 100% vested in this Award if your Continuous Service ends due to your Involuntary Termination on or within 12 months after a Change in Control (subject to the terms of any employment or other agreement between you and the Company and/or any Affiliate).

Deferral Elections	Not allowed.
§83(b) Elections	Allowed pursuant to Section 7(d) of the Plan (a suggested form of Election is attached hereto as <u>Exhibit C</u>).
Recapture and Recoupment	Section 14 of the Plan shall apply regarding Termination, Rescission, and Recapture of this Award. Section 15 shall apply regarding Recoupment of this Award; provided that the three-year limitation shall not apply to the extent a longer period is required by applicable law, rule, regulation, or listing standard.
Lifetime Transfers	Your rights under this Award Agreement and the Restricted Shares may not be sold, pledged, or otherwise transferred without the prior written consent of the Committee.

- Termination of Continuous Service.** Subject to the terms of any employment agreement between you and the Company that is in effect when your Continuous Service terminates, this Award shall be canceled and shall become automatically null and void immediately after termination of your Continuous Service for any reason, but only to the extent you have not become vested, pursuant to terms of Section 1 above, on or before your Continuous Service ends.
- Dividends.** When Shares are delivered to you or your duly-authorized transferee pursuant to the vesting of the Shares, you or your duly-authorized transferee shall also be entitled to receive, with respect to each Share delivered, (i) a number of Shares equal to the stock dividends that were declared and paid to the holders of Shares between the Award Date and the date such Share is issued, and (ii) cash or a number of Shares having a Fair Market Value (on the date of each cash dividend payment date) equal to any cash dividends that were paid to the holders of Shares based on a record date between the Award Date and date such share is delivered. To the extent that your Continuous Service ends, you will forfeit all dividends (whether paid in cash or in stock) attributable to all unvested Shares.
- Investment Purposes.** By executing this Award, you acknowledge that you are receiving and will be holding your Restricted Shares for investment purposes only for your own account, and not with a view to, for resale in connection with, or with an intent of participating directly or indirectly in, any distribution of such Shares within the meaning of the Securities Act of 1933, as amended (the "Securities Act").
- Issuance of Restricted Shares.** Until all vesting restrictions lapse, any certificates that you receive for Restricted Shares will include a legend stating that they are subject to the restrictions set forth in the Plan and this Award Agreement. The certificates evidencing such Restricted Shares that will be issued will bear the following legend that shall remain in place and effective until all other vesting restrictions lapse and new certificates are issued:

The sale or other transfer of the Stock represented by this certificate, whether voluntary, involuntary, or by operation of law, is subject to certain vesting, forfeiture, termination, rescission, and recapture restrictions on transfer set forth in the Gevo, Inc. 2010 Stock Incentive Plan, in a related Award Agreement, and in any rules and administrative procedures adopted pursuant to such Plan or related Award Agreement. A copy of the Plan, such Award Agreement, and such rules and procedures may be obtained from the Secretary of Gevo, Inc.

In addition, the Company shall make a notation regarding the restrictions on transfer of the Restricted Shares in its stock books, and shares of the Restricted Shares shall be transferred on the books of the Company only if transferred or sold in accordance with the terms of the Plan and this Award Agreement.

6. **Unvested Restricted Shares.** The Company will hold all Restricted Shares in escrow until vesting occurs. You will be reflected as the owner of record on the Company's books and records of any Shares issued pursuant to this Award Agreement. The Company will hold the stock certificates for safekeeping until such Shares have become vested and non-forfeitable. You must deliver to the Company, as soon as practicable after the date any Shares are issued, a stock power, endorsed in blank, with respect to any such Shares. If you forfeit any Shares, the stock power will be used to return the certificates for the forfeited Shares to the transfer agent for cancellation. As the owner of record of any Restricted Shares you qualify to receive pursuant to this Award Agreement, you will be entitled to all rights of a stockholder of the Company, including the right to vote Shares; subject, however, to the provisions of Section 3 hereof with respect to any cash or stock dividends that are paid between the date of this Award and your receipt of shares pursuant to a vesting event, subject in each case to the treatment of the Award upon cessation of Continuous Service before the particular record date for determining stockholders of record entitled to the payment of the dividend or distribution. To the extent such a dividend is paid in stock or cash, such stock or cash shall be subject to the same vesting restrictions contained in Section 1.
7. **Section 83(b) Election Notice.** If you make an election under Section 83(b) of the Internal Revenue Code of 1986, as amended, with respect to the Shares underlying your Restricted Shares (a "Section 83(b) election"), you agree to provide a copy of such election to the Company within 10 days after filing that election with the Internal Revenue Service. Exhibit C contains a suggested form of Section 83(b) election.
8. **Designation of Beneficiary.** Notwithstanding anything to the contrary contained herein or in the Plan, following the execution of this Award Agreement, you may expressly designate a beneficiary (the "Beneficiary") to your interest, if any, in this Award and any underlying Shares. In order to designate a Beneficiary you must complete and execute a designation of beneficiary agreement substantially in the form attached hereto as Exhibit D (the "Designation of Beneficiary") and deliver an executed copy of the Designation of Beneficiary to the Company's Secretary.
9. **Restrictions on Transfer of Award.** If, while Shares are Restricted Shares, you attempt to assign, pledge, transfer, or otherwise dispose of such Restricted Shares, voluntarily or involuntarily, all rights with respect to such Restricted Shares shall irrevocably terminate and

all such Restricted Shares shall promptly be surrendered to the Company. Notwithstanding anything to the contrary contained in this Award Agreement, including the foregoing sentence, you may transfer the Restricted Shares that are subject to this Award (i) by instrument to an *inter vivos* or testamentary trust (or other entity) in which each beneficiary is a permissible gift recipient, as such is set forth in subsection (ii) of this Section, or (ii) by gift to charitable institutions or by gift or transfer for consideration to any of your following relatives (or to an *inter vivos* trust, testamentary trust or other entity primarily for the benefit of your following relatives): any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, domestic partner, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law (each of these permissible transferee categories includes adoptive relationships). Any transferee of your rights shall succeed and be subject to all of the terms of this Award Agreement and the Plan.

10. **Conditions on Issuance of Shares; Transfer Restrictions.** Notwithstanding any other provision of the Plan or of this Award Agreement: (i) the Committee may condition your receipt of Shares on your execution of a shareholder agreement imposing terms generally applicable to other similarly-situated employee-shareholders; and (ii) any Shares issued pursuant to this Award Agreement shall be non-transferable except in accordance with Section 9, above, until the first day of the seventh month following the termination of your Continuous Service. In addition, the Company at its discretion may impose restrictions upon the sale, pledge or other transfer of Shares received pursuant to this Award Agreement (including the placement of appropriate legends on stock certificates or the imposition of stop-transfer instructions) if, in the judgment of the Company, such restrictions are necessary or desirable in order to achieve compliance with the Securities Act or the securities laws of any state or any other law or to enforce the intent of this Award.
11. **Taxes.** Except to the extent otherwise specifically provided in another document establishing contractual rights for you, by signing this Award Agreement, you acknowledge that you shall be solely responsible for the satisfaction of any taxes, interest and penalties that may arise pursuant to this Award (including taxes arising under Sections 409A or 4999 of the Code), and that the Company, its Affiliates, the Administrator and all other persons or entities shall have no obligation whatsoever to pay such taxes, interest or penalties or otherwise indemnify or hold you harmless from any or all of such taxes, interest or penalties. The Committee shall have the sole discretion to interpret the requirements of the Code, including Section 409A, for purposes of the Plan and this Award Agreement. You acknowledge and agree that the Company, its Affiliates, the Administrator and all of their employees and representatives have not and will not provide any tax advice to you. ***The Company's obligation to issue Shares to you upon vesting is at all times subject to your prior or coincident satisfaction of all required Withholding Taxes.***
12. **Notices.** Any notice or communication required or permitted by any provision of this Award Agreement to be given to you shall be in writing and shall be delivered electronically, personally, or sent by certified mail, return receipt requested, addressed to you at the last address that the Company had for you on its records. Each party may, from time to time, by notice to the other party hereto, specify a new address for delivery of notices relating to this Award Agreement. Any such notice shall be deemed to be given as of the date such notice is personally delivered or two business days after the date such notice is properly mailed.

13. **Binding Effect.** Except as otherwise provided in this Award Agreement or in the Plan, every covenant, term, and provision of this Award Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, legatees, legal representatives, successors, transferees, and assigns.
14. **Modifications.** This Award Agreement may be modified or amended at any time, in accordance with the Plan (including, but not limited to, Section 18 of the Plan) and provided that you must consent in writing to any modification that adversely and materially affects any rights or obligations under this Award Agreement (with such an affect being presumed to arise from a modification that would trigger a violation of Section 409A of the Code), unless otherwise provided in this Award Agreement or the Plan and provided that before a Change in Control, the Committee may make such modifications as it determines in good faith are not materially adverse to you.
15. **Headings.** Section and other headings contained in this Award Agreement are for reference purposes only and are not intended to describe, interpret, define or limit the scope or intent of this Award Agreement or any provision hereof.
16. **Severability.** Every provision of this Award Agreement and of the Plan is intended to be severable. If any term hereof is illegal or invalid for any reason, such illegality or invalidity shall not affect the validity or legality of the remaining terms of this Award Agreement.
17. **Counterparts.** This Award Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but both such counterparts shall together constitute one and the same instrument.
18. **Plan Governs.** By signing this Award Agreement, you acknowledge that you have received a copy of the Plan and that your Award Agreement is subject to all the provisions contained in the Plan, the provisions of which are made a part of this Award Agreement and your Award is subject to all interpretations, amendments, rules and regulations which from time to time may be promulgated and adopted pursuant to the Plan. In the event of a conflict between the provisions of this Award Agreement and those of the Plan, the provisions of the Plan shall control.
19. **Not a Contract of Employment.** By executing this Award Agreement you acknowledge and agree that (i) any person who is terminated before full vesting of an award, such as the one granted to you by this Award, could claim that he or she was terminated to preclude vesting; (ii) you promise never to make such a claim; (iii) in any event, you have no right to pro-rated vesting with respect to the Award if your Continuous Service is terminated before any applicable Vesting Date (regardless of the portion of the vesting period you actually were in Continuous Service), (iv) nothing in this Award Agreement or the Plan confers on you any right to continue an employment, service or consulting relationship with the Company or any Affiliate, nor shall it affect in any way your right or the Company's right or the right of any Affiliate to terminate your employment, service, or consulting relationship at any time, with or without Cause; and (v) the Company would not have granted this Award to you but for these acknowledgements and agreements.

20. **Governing Law.** The laws of the State of Delaware shall govern the validity of this Award Agreement, the construction of its terms, and the interpretation of the rights and duties of the parties hereto.

BY YOUR SIGNATURE BELOW, along with the signature of the Company's representative, you and the Company agree that the Restricted Shares are awarded under and governed by the terms and conditions of this Award Agreement and the Plan.

Gevo, Inc.

By:
Name:
Title:

PARTICIPANT

The undersigned Participant hereby accepts the terms of this Award Agreement and the Plan.

By:
Name of Participant:

**GEVO, INC.
2010 STOCK INCENTIVE PLAN**

Plan Document

**GEVO, INC.
2010 STOCK INCENTIVE PLAN**

Plan Prospectus

GEVO, INC.
2010 STOCK INCENTIVE PLAN

Section 83(b) Election Form

Attached is an Internal Revenue Code Section 83(b) Election Form. **IF YOU WISH TO MAKE A SECTION 83(B) ELECTION, YOU MUST DO SO WITHIN 30 DAYS AFTER THE DATE THE RESTRICTED SHARES COVERED BY THE ELECTION WERE TRANSFERRED (WITHIN THE MEANING OF SECTION 83(B)) TO YOU.** In order to make the election, you must completely fill out the attached form (or an acceptable substitute substantially identical to the attached form) and file one copy with the Internal Revenue Service office where you file your tax return. In addition, one copy of the form also must be submitted with your income tax return for the taxable year in which you make this election. Finally, you also must submit a copy of the election form to the Company within 10 days after filing that election with the Internal Revenue Service. A Section 83(b) election normally cannot be revoked.

GEVO, INC.
2010 STOCK INCENTIVE PLAN

**Election to Include Value of Restricted Shares in Gross Income
in Year of Transfer Under Internal Revenue Code Section 83(b)**

Pursuant to Section 83(b) of the Internal Revenue Code, I hereby elect within 30 days after receiving the property described herein to be taxed immediately on its value specified in item 5 below.

1. My General Information:

Name: _____
Address: _____
S.S.N. or T.I.N.: _____

2. Description of the property with respect to which I am making this election: _____ shares of _____ stock of Gevo, Inc. (the "Restricted Shares").

3. The Restricted Shares were transferred to me on _____, 20____. This election relates to the 20____ calendar taxable year.

4. The Restricted Shares are subject to the following restrictions:

The Restricted Shares are forfeitable until they are earned in accordance with Section 1 of the Gevo, Inc. 2010 Stock Incentive Plan ("Plan") Restricted Share Award Agreement ("Award Agreement") or other Award Agreement or Plan provisions. The Restricted Shares generally are not transferable until my interest becomes vested and nonforfeitable, pursuant to the Award Agreement and the Plan.

5. Fair market value:

The fair market value at the time of transfer (determined without regard to any restrictions other than restrictions which by their terms never will lapse) of the Restricted Shares with respect to which I am making this election is \$ _____ per share.

6. Amount paid for Restricted Shares:

The amount I paid for the Restricted Shares is \$ _____ per share.

7. Furnishing statement to employer:

A copy of this statement has been furnished to my employer, _____. If the transferor of the Restricted Shares is not my employer, that entity also has been furnished with a copy of this statement.

8. Award Agreement or Plan not affected:

Nothing contained herein shall be held to change any of the terms or conditions of the Award Agreement or the Plan.

Dated: _____, 20__.

Taxpayer

GEVO, INC.
2010 STOCK INCENTIVE PLAN

Designation of Beneficiary

In connection with the Awards designated below that I have received pursuant to the Plan, I hereby designate the person specified below as the beneficiary upon my death of my interest in Awards as defined in the Company's 2010 Stock Incentive Plan (the "Plan"). This designation shall remain in effect until revoked in writing by me.

Name of Beneficiary: _____
Address: _____

Social Security No.: _____

This beneficiary designation relates to any and all of my rights under the following Award or Awards:

- any Award that I have received or ever receive under the Plan.
- any Restricted Shares that I have received or ever receive under the Plan.
- the _____ Award of _____ that I received pursuant to an award agreement dated _____, _____ between myself and the Company.

I understand that this designation operates to entitle the above named beneficiary, in the event of my death, to any and all of my rights under the Award(s) designated above from the date this form is delivered to the Company until such date as this designation is revoked in writing by me, including by delivery to the Company of a written designation of beneficiary executed by me on a later date.

Date: _____
By: _____
Name of Participant

Sworn to before me this
__ day of _____, 20__

Notary Public
County of _____
State of _____

GEVO, INC.
2010 STOCK INCENTIVE PLAN

Stock Option Award Agreement

You are hereby awarded this stock option (the "Option") to purchase Shares of Gevo, Inc. (the "Company"), subject to the terms and conditions set forth in this Stock Option Award Agreement (the "Award Agreement") and in the Gevo, Inc. 2010 Stock Incentive Plan (the "Plan"). A copy of the Plan is attached as Exhibit A. Terms below that begin with capital letters have the special meaning set forth in the Plan or in this Award Agreement.

This Award is conditioned on your execution of this Award Agreement within twenty (20) days after the Grant Date specified in Section 1 below. By executing this Award Agreement, you will be irrevocably agreeing that all of your rights under this Award will be determined solely and exclusively by reference to the terms and conditions of the Plan, subject to the provisions set forth below. As a result, you should not execute this Award Agreement until you have carefully considered the terms and conditions of the Plan and this Award, plus the information disclosed within the attached Plan prospectus, and (ii) consulted with your personal legal and tax advisors about all of these documents.

1. **Specific Terms.** Your Option has the following terms:

Name of Participant:	
Type of Option:	<input type="checkbox"/> Incentive Stock Option (ISO) ¹ <input type="checkbox"/> Non-Incentive Stock Option (non-ISO) ²
Grant Date:	_____, 20__.
Expiration Date:	__ years after Grant Date, at 5:00 p.m. (E.D.T. or E.S.T., as applicable) on the Expiration Date.
Exercise Price:	U.S. \$____.____ per Share.
Number of Shares subject to this Award:	_____.
Dividend Equivalent Rights:	Not applicable to this Award.

¹ If you directly or indirectly own more than 10% of the voting power of all classes of stock of the Company or of any Subsidiary, then the term of your ISO cannot exceed 5 years and the exercise price must be at least 110% of the Fair Market Value (100% for any other employee who is receiving ISO awards). Only employees may receive ISOs.

² The exercise price of a non-ISO must be at least 100% of the Fair Market Value of the underlying Shares.

Vesting:	Your Award will vest in accordance with the following schedule: one-third (1/3) of the Shares designated above shall vest on the first anniversary date of the Grant Date and one thirty-sixth (1/36) of the Shares shall vest on each monthly anniversary of the Grant Date thereafter (each a " <u>Vesting Date</u> ") such that all of the Shares shall be fully vested on the third anniversary of the Grant Date, provided that your Continuous Service has not ended before the particular Vesting Date (subject to the terms of any employment or other agreement between you and the Company).
Accelerated Vesting:	You will become 100% vested in this Award if your Continuous Service ends due to your Retirement, your death, your Disability, or your Involuntary Termination on or within 12 months after a Change in Control (subject to the terms of any employment or other agreement between you and the Company).
Recapture and Recoupment:	Section 14 of the Plan shall apply re Termination, Rescission, and Recapture of this Award. Section 15 shall apply re: Recoupment of this Award; provided that the three-year limitation shall not apply to the extent a longer period is required by applicable law, rule, regulation or listing standard.

2. **Manner of Exercise.** Subject to the provisions of Section 7 below, this Option shall be exercised in the manner set forth in the Plan, by using the exercise form attached hereto as **Exhibit B** and delivering the full exercise price for the Shares being purchased to the Company using the method(s) of payment set forth on **Exhibit B**. The amount of Shares for which this Option may be exercised is cumulative; that is, if you fail to exercise this Option for all of the Shares vested under this Option during any period set forth above, then any Shares subject hereto that are not exercised during such period may be exercised during any subsequent period, until the expiration or termination of this Option pursuant to Section 1 or Section 4 of this Award Agreement or the terms of the Plan. Fractional Shares may not be purchased.

3. **Special ISO Provisions.** If designated as an ISO, this Option shall be treated as an ISO to the extent allowable under Section 422 of the Code, and shall otherwise be treated as a Non-ISO. If you sell or otherwise dispose of Shares acquired upon the exercise of an ISO within 1 year from the date such Shares were acquired or 2 years from the Grant Date, you agree to deliver a written report to the Company within 10 days following the sale or other disposition of such Shares detailing the net proceeds of such sale or disposition.

4. **Termination of Continuous Service.** Subject to the terms of any employment agreement between you and the Company (and/or any Affiliate) that is in effect when your Continuous Service terminates, this Award shall be canceled and become automatically null and void immediately after termination of your Continuous Service for any reason, but only to the extent you have not become vested, pursuant to the terms of Section 1 above, on or before your Continuous Service ends.

5. **Designation of Beneficiary.** Notwithstanding anything to the contrary contained herein or in the Plan, following the execution of this Award Agreement, you may expressly designate a death beneficiary (the "**Beneficiary**") to your interest if any, in this Award and any underlying Shares. You shall designate the Beneficiary by completing and executing a designation of beneficiary agreement substantially in the form attached hereto as **Exhibit C** (the "**Designation of Death Beneficiary**") and delivering an executed copy of the Designation of Death Beneficiary to the Company. To the extent you do not duly designate a Beneficiary who survives you, your estate will automatically be your Beneficiary.

6. **Restrictions on Transfer of Award.** Your rights under this Award Agreement may not be sold, pledged, or otherwise transferred without the prior written consent of the Committee, except as hereinafter provided.

7. **Taxes.** Except to the extent otherwise specifically provided in an employment or consulting agreement between you and the Company (and/or any Affiliate), by signing this Award Agreement, you acknowledge that you shall be solely responsible for the satisfaction of any taxes that may arise pursuant to this Award (including taxes arising under Sections 409A (regarding deferred compensation) or 4999 (regarding golden parachute excise taxes), and that neither the Company (or any Affiliate) nor the Administrator shall have any obligation whatsoever to pay such taxes or to otherwise indemnify or hold you harmless from any or all of such taxes. The Committee shall have the sole discretion to interpret the requirements of the Code, including Section 409A, for purposes of the Plan and this Award Agreement. The Company's obligation to issue Shares to you upon exercise of this Award is at all times subject to your prior or coincident satisfaction of all required Withholding Taxes.

8. **Not a Contract of Employment.** By executing this Award, you acknowledge and agree that (i) any person who is terminated before full vesting of an award, such as the one granted to you by this Award Agreement, could claim that he or she was terminated to preclude vesting; (ii) you promise never to make such a claim; (iii) nothing in this Award Agreement or the Plan confers on you any right to continue an employment, service or consulting relationship with the Company (or any Affiliate), nor shall it affect in any way your right or the Company's right (or the right of any Affiliate) to terminate your employment, service, or consulting relationship at any time, with or without Cause; and (iv) the Company would not have granted this Award to you but for these acknowledgements and agreements.

9. **Investment Purposes.** By executing this Award Agreement, you represent and warrant that any Shares issued to you pursuant to your Option will be held for investment purposes only for your own account, and not with a view to, for resale in connection with, or with an intent in participating directly or indirectly in, any distribution of such Shares within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

10. **Securities Law Prospectus and Restrictions.** By executing this Award Agreement you acknowledge that you have received a copy of the Prospectus describing the Plan. A copy of the Plan's Prospectus is attached as Exhibit D. Regardless of whether the offering and sale of this Option or Shares under the Plan have been registered under the Securities Act or have been registered or qualified under the securities laws of any state, the Company, in its sole discretion, may impose restrictions upon the sale, pledge or other transfer of such Shares (including the placement of appropriate legends on stock certificates or the imposition of stop-transfer instructions) if, in the judgment of the Company, such restrictions are necessary or desirable in order to achieve compliance with the Securities Act or the securities laws of any state or any other law or to enforce the intent of this Award.

11. **Headings.** Section and other headings contained in this Award Agreement are for reference purposes only and are not intended to describe, interpret, define or limit the scope or intent of this Award Agreement or any provision hereof.

12. **Severability.** Every provision of this Award Agreement and of the Plan is intended to be severable. If any term hereof is illegal or invalid for any reason, such illegality or invalidity shall not affect the validity or legality of the remaining terms of this Award Agreement.

13. **Counterparts.** This Award Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but both such counterparts shall together constitute one and the same instrument.

14. Notices. Any notice or communication required or permitted by any provision of this Award Agreement to be given to you shall be in writing and shall be delivered electronically, personally, or sent by certified mail, return receipt requested, addressed to you at the last address that the Company had for you on its records. Each party may, from time to time, by notice to the other party hereto, specify a new address for delivery of notices relating to this Award Agreement. Any such notice shall be deemed to be given as of the date such notice is personally or electronically delivered or two business days after such notice is properly mailed.

15. Binding Effect. Except as otherwise provided in this Award Agreement or in the Plan, every covenant, term, and provision of this Award Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, legatees, legal representatives, successors, transferees, and assigns.

16. Modifications. This Award Agreement may be modified or amended at any time, in accordance with Section 18 of the Plan and provided that you must consent in writing to any modification that adversely and materially affects any rights or obligations under this Award Agreement.

17. Plan Governs. By signing this Award Agreement, you acknowledge that you have received a copy of the Plan and that your Award Agreement is subject to all the provisions contained in the Plan, the provisions of which are made a part of this Award Agreement and your Award is subject to all interpretations, amendments, rules and regulations which from time to time may be promulgated and adopted pursuant to the Plan. In the event of a conflict between the provisions of this Award Agreement and those of the Plan, the provisions of the Plan shall control.

18. Governing Law. The laws of the Delaware shall govern the validity of this Award Agreement, the construction of its terms, and the interpretation of the rights and duties of the parties hereto.

BY YOUR SIGNATURE BELOW, along with the signature of the Company's representative, you and the Company agree that this Award is made under and governed by the terms and conditions of this Award Agreement and the Plan.

GEVO, INC.

By: _____
Name:
Title:

PARTICIPANT

The undersigned Participant hereby accepts the terms of this Award Agreement and the Plan.

By: _____
Name of Participant: _____

**GEVO, INC.
2010 STOCK INCENTIVE PLAN**

Plan Document

**GEVO, INC.
2010 STOCK INCENTIVE PLAN**

Form of Exercise of Stock Option Award Agreement

Gevo, Inc.

[Company Address]

Attention: _____

Dear Sir or Madam:

The undersigned elects to exercise his/her Option to purchase _____ shares of Common Stock of Gevo, Inc. (the "Company") under and pursuant to a Stock Option Agreement dated as of _____.

Delivered herewith is a certified or bank cashier's or teller's check and/or shares of Common Stock owned by the undersigned, valued at the closing sale price of the stock on the business day prior to the date of exercise, as follows:

\$ _____	in cash or check
\$ _____	in the form of _____ shares of Common Stock, valued at \$ _____ per share
\$ _____	Total

If applicable, the name or names to be on the stock certificate or certificates and the address and Social Security Number of such person(s) is as follows:

Name: _____

Address: _____

Social Security Number _____

Very truly yours,

Date

Optionee

**GEVO, INC.
2010 STOCK INCENTIVE PLAN**

Designation of Death Beneficiary

In connection with the Awards designated below that I have received pursuant to the Gevo, Inc. 2010 Stock Incentive Plan (the "Plan"), I hereby designate the person specified below as the beneficiary upon my death of my interest in such Awards. This designation shall remain in effect until revoked in writing by me.

Name of Beneficiary: _____

Address: _____

Social Security No.: _____

This beneficiary designation relates to any and all of my rights under the following Award or Awards:

- any Award that I have received or ever receive under the Plan.
- the _____ Award that I received pursuant to an Award Agreement dated _____, ____ between myself and the Company.

I understand that this designation operates to entitle the above named beneficiary, in the event of my death, to any and all of my rights under the Award(s) designated above from the date this form is delivered to the Company until such date as this designation is revoked in writing by me, including by delivery to the Company of a written designation of beneficiary executed by me on a later date.

Date: _____

By: _____
Name of Participant

Sworn to before me this
__ day of _____, 20__

Notary Public
County of _____
State of _____

**GEVO, INC.
2010 STOCK INCENTIVE PLAN**

Prospectus describing the Plan

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-172771 on Form S-8 of our report dated March 28, 2011, relating to the consolidated financial statements of Gevo, Inc. and its subsidiaries (the "Company") (which report expresses an unqualified opinion on the consolidated financial statements and includes explanatory paragraphs referring to the Company's status as a development stage enterprise and the change in the method of accounting for preferred stock warrants), appearing in this Annual Report on Form 10-K of Gevo, Inc. and its subsidiaries for the year ended December 31, 2010.

/s/ Deloitte & Touche LLP
Denver, Colorado
March 28, 2011

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
(Pursuant to Rule 13a-14(a) of the
Securities Exchange Act of 1934, as amended,
as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002)

I, Patrick R. Gruber, certify that:

1. I have reviewed this annual report on Form 10-K of Gevo, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 28, 2011

/s/ PATRICK R. GRUBER

Patrick R. Gruber
Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION OF CHIEF FINANCIAL OFFICER
(Pursuant to Rule 13a-14(a) of the
Securities Exchange Act of 1934, as amended,
as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002)

I, Mark Smith, certify that:

1. I have reviewed this annual report on Form 10-K of Gevo, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 28, 2011

/s/ MARK SMITH

Mark Smith
Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION

I, Patrick R. Gruber, Chief Executive Officer of Gevo, Inc. (the "Company"), and I, Mark Smith, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2010, (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for the period covered by the Report.

/s/ PATRICK R. GRUBER

Patrick R. Gruber
Chief Executive Officer

Date: March 28, 2011

/s/ MARK SMITH

Mark Smith
Chief Financial Officer

Date: March 28, 2011

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Report to which it relates, is not deemed filed with the SEC and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, whether made before or after the date of the Report and irrespective of any general incorporation language contained in such filing.