Gevo, Inc.
Form S-1/A
February 04, 2011
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As filed with the Securities and Exchange Commission on February 4, 2011

Registration No. 333-168792

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 5 to

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

GEVO, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**8731**	**87-0747704**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification Number)**

345 Inverness Drive South, Building C, Suite 310, Englewood, CO 80112

(303) 858-8358

(Address, including zip code, and telephone number, including area code, of Registrant s principal executive offices)

Patrick R. Gruber, Ph.D.

Chief Executive Officer

Gevo, Inc.

345 Inverness Drive South, Building C, Suite 310

Englewood, CO 80112

(303) 858-8358

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public:

As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ¨

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

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.

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee(2)
Common Stock, $0.01 par value	$123,337,500	$8,793.97

(1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933. Includes the offering price of additional shares that the underwriters have the option to purchase.
(2) Previously paid.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information contained in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS Subject to Completion February 4, 2011

7,150,000 Shares

Common Stock

This is the initial public offering of our common stock. No public market currently exists for our common stock. We are offering all of the 7,150,000 shares of common stock offered by this prospectus. We expect the public offering price to be between $13.00 and $15.00 per share.

Our common stock has been approved for listing on The Nasdaq Global Market, subject to official notice of issuance, under the symbol GEVO.

Investing in our common stock involves a high degree of risk. Before buying any shares, you should carefully read the discussion of material risks of investing in our common stock in Risk factors beginning on page 16 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share	Total
Public offering price	$	$
Underwriting discounts and commissions	$	$
Proceeds, before expenses, to us	$	$

The underwriters may also purchase up to an additional 1,072,500 shares of our common stock at the public offering price, less the underwriting discounts and commissions payable by us, to cover over-allotments, if any, within 30 days from the date of this prospectus. If the underwriters exercise this option in full, the total underwriting discounts and commissions will be $ and our total proceeds, after underwriting discounts and commissions but before expenses, will be $.

The underwriters are offering the common stock as set forth under Underwriting. Delivery of the shares will be made on or about , 2011.

UBS Investment Bank **Piper Jaffray** **Citi**

Simmons & Company International

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You should rely only on the information contained in this prospectus. We and the underwriters have not authorized anyone to provide you with information different from that contained in this prospectus. We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front cover of this prospectus, or such other dates as are stated in this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock.

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Conventions that apply to this prospectus

Unless the context otherwise requires, in this prospectus:

- the company, we, us and our refer to Gevo, Inc. and its subsidiaries, as the context requires;
- MGPY refers to million gallons per year;
- BGPY refers to billion gallons per year;
- SRI refers to SRI Consulting, a division of Access Intelligence, LLC;
- CMAI refers to Chemical Market Associates, Inc.;
- EIA refers to the US Energy Information Association;
- IEA refers to the International Energy Agency;
- RFA refers to the Renewable Fuels Association;
- Nexant refers to Nexant, Inc.; and
- CDTECH refers to Catalytic Distillation Technologies.

Certain market data presented in this prospectus has been derived from data included in various biofuels industry publications, surveys and forecasts, including those generated by SRI, CMAI, the EIA, the IEA, the RFA and Nexant. Certain target market sizes presented in this prospectus have been calculated by us (as further described below) based on such data. We have assumed the correctness and truthfulness of such data, including projections and estimates, when we use them in this prospectus. You should read our cautionary statement in the section entitled Forward-Looking Statements.

With respect to calculation of product market volumes:

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

  - we calculate 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 convert all market sizes into gallons. Conversion into gallons for the fuels markets is based upon fuel densities identified by Air BP Ltd. and the American Petroleum Institute.

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Prospectus summary

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information you should consider in making your investment decision. You should read this summary together with the more detailed information, including our financial statements and the related notes, appearing elsewhere in this prospectus. You should carefully consider, among other things, the matters discussed in Risk Factors, before making an investment decision.

BUSINESS OVERVIEW

Our company

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 its 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 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 incumbent petrochemical products will have lower market adoption hurdles, as 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,

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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 minimal revenue and has 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. Our isobutanol, and the products produced from it will also offer our potential customers the additional benefit of being able to market their products as environmentally sensitive.

Our initial commercialization efforts are focused on the following markets:

- **Isobutanol.** Without any modification isobutanol has direct applications as a specialty chemical and a fuel blendstock. In the specialty chemical market, among other things, isobutanol can be sold for immediate use as a solvent. The global market for butanol as a specialty chemical represents approximately 1.1 BGPY, based upon volume data from SRI. In the fuel blendstock market, isobutanol can be used to replace high value blendstocks such as alkylate and can be blended in conjunction with, or as a substitute for, ethanol and other widely-used fuel oxygenates. Our estimate of the global market for isobutanol as a gasoline oxygenate is approximately 40 BGPY, based upon data from the IEA. While isobutanol can be used as a replacement for ethanol, its product properties are significantly differentiated from ethanol. As a gasoline blendstock, isobutanol s low vapor pressure, high energy content and low water solubility versus ethanol make it a valuable product that can be sold directly to refiners and is expected to be compatible with existing engine and industry infrastructure, including pipeline assets. Combined, the total global market for isobutanol as a fuel blendstock and specialty chemical represents approximately 41.1 BGPY. 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.

- **Plastics, Fibers, Rubber and Other Polymers.** Isobutanol can be converted by our potential customers into a wide variety of hydrocarbons, which form the basis for the production of many products, including: rubber, lubricants, additives, methyl methacrylate, polypropylenes, polyesters and polystyrene, representing an aggregate potential market for isobutanol of approximately 67 BGPY, based upon volume data from SRI, CMAI and Nexant.

- **Hydrocarbon Fuels.** The hydrocarbons that can be produced from isobutanol can be used to manufacture specialty gasoline blendstocks, jet and diesel fuel, as well as other hydrocarbon fuels. The hydrocarbon fuels that can be produced from isobutanol collectively represent a potential market for isobutanol of over 900 BGPY, based upon volume data from the IEA.

Much of the technology necessary to convert isobutanol into plastics, fibers, rubber, other polymers and hydrocarbon fuels is known and practiced in the chemicals industry today. Our technology will allow us to access these large target markets by delivering isobutanol at a cost structure that allows for the adoption of renewable products into markets that were once the exclusive domain of petroleum-based chemicals and fuels.

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The graphic below outlines the variety and magnitude of the markets that we are targeting for the initial commercialization of our isobutanol:

Our biobased isobutanol provides us with substantial opportunities in major markets currently dominated by petroleum-derived products.

The volume figures set forth above have been provided solely to show the magnitude of the potential markets for isobutanol and its derivatives. They are not intended to be projections of our isobutanol production or sales. See Conventions that apply to this prospectus for the basis of our calculations of the volumes of isobutanol that could serve these markets.

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Our commercialization plan

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 believe that this retrofit approach will allow us to rapidly expand our isobutanol production capacity in response to customer demand. GIFT is designed to enable the economic production of isobutanol and other alcohols from multiple renewable feedstocks, including grains, sugar cane and cellulosic feedstocks. We expect that our feedstock flexibility will allow our technology to be deployed worldwide and will enable us to offer our customers protection from the raw material cost volatility historically associated with petroleum-based products. As a result, we believe our isobutanol not only offers a compelling value proposition to customers in the chemicals and fuels markets, but should also increase the operating margins of existing ethanol plants.

We plan to align our isobutanol production capacity with specific customer demand. Accordingly, we are developing a pipeline of future customers for our isobutanol and its derivative chemical products across multiple global chemicals and fuels markets. In anticipation of our targeted initial commercial production of isobutanol in the first half of 2012, we have entered into a number of letters of intent and we are negotiating the final terms of several definitive agreements with future customers and partners in the chemicals and fuels markets, including:

- **LANXESS Inc.**, a leading chemicals company;
- **TOTAL PETROCHEMICALS USA, INC.**, an affiliate of TOTAL S.A., a major oil and gas integrated company;
- **Toray Industries, Inc.**, a leader in the development of fibers, plastics and chemicals;
- **United Air Lines, Inc.**, a major commercial airline; and
- **CDTECH**, a leading hydrocarbon technology provider for the petrochemical and refining industry.

In addition, we are in discussions with major refiners that have indicated an interest in forming partnerships with us to manufacture renewable jet fuel using our isobutanol. We also intend to develop relationships with companies that are engineering and piloting the processes necessary to convert isobutanol to biobased jet fuel and then license this technology to refiners and petrochemical companies that intend to use our isobutanol and other biobased butanols for the production of biobased jet fuel.

We are also in discussions with a number of companies that may consider using our isobutanol, without modification, as a specialty chemical or a fuel blendstock. In November 2010, we entered into a non-binding letter of intent with Sasol Chemical Industries Ltd., acting through its Solvents Division, pursuant to which we intend to negotiate the terms of a definitive agreement for the sale and distribution of our isobutanol to be used primarily in solvent applications. This ready market for isobutanol is particularly valuable because the use of isobutanol as a specialty chemical does not require regulatory approval.

We are also actively pursuing commercial relationships with petrochemical manufacturers that have the ability to produce butenes and other hydrocarbon products from our isobutanol and with large brand owners regarding the use of our isobutanol in the production of biobased plastics, fibers, rubber and other polymers. In November 2010, we entered into a non-binding letter of intent with South Hampton Resources, Inc., or 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 to further process at least a portion of that isobutylene to produce kerosene for use as a renewable jet fuel blendstock.

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We believe that the relationships described above will contribute to the development of chemical and fuel market applications of our isobutanol. However, there can be no assurance that we will be able to enter into definitive supply or distribution agreements with the potential customers discussed above, or attract customers based on our arrangements with the petrochemical companies and large brand owners discussed above.

We are also currently in discussions with several ethanol plant owners that have expressed an interest in either selling their facilities to us or entering into joint ventures with us to retrofit their plants 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.

We are currently targeting initial commercial production of isobutanol to begin in the first half of 2012. In connection with meeting this target, in August 2010 we entered into an acquisition agreement with Agri-Energy, LLC, Agri-Energy Limited Partnership, CORN-er Stone Ethanol Management, Inc. and CORN-er Stone Farmers Cooperative, referred to collectively as Agri-Energy. In September 2010, we closed the transactions contemplated by the acquisition agreement and acquired a 22 MGPY ethanol production facility in Luverne, Minnesota which we intend to retrofit for isobutanol production. We paid a purchase price of approximately $20.7 million in connection with these transactions. In addition, we acquired and paid for $4.9 million in estimated working capital. We paid the aggregate purchase price from available cash reserves and previously arranged financing.

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 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.

Our production solution

We developed our technology platform to be compatible with the existing approximately 20 BGPY of global operating ethanol production capacity. GIFT is designed to allow 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. 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.

A commercial engineering study completed in May 2010 by ICM, Inc., or ICM, a leading engineering firm that has designed approximately 60% of the RFA-estimated 12 BGPY US operating ethanol production capacity, projected that each GIFT retrofit process would take approximately 14 months to complete. 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. Consistent with the practice typical in conventional corn ethanol production, we intend to market the high-protein, high-energy animal feed that will be produced as a co-product of our isobutanol fermentation process to offset a significant portion of our grain feedstock costs.

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Through an exclusive alliance with ICM, we have successfully demonstrated the production of isobutanol via the retrofit of a 1 MGPY ethanol facility in St. Joseph, Missouri using our first-generation biocatalyst. We plan to secure access to existing ethanol production facilities through direct acquisitions and joint ventures. We will then work with ICM to deploy our technology platform through retrofit of these production facilities. The May 2010 commercial engineering study completed by ICM 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 and 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.

In September 2010, we acquired a 22 MGPY ethanol production facility in Luverne, Minnesota. Based on ICM s initial evaluation of the Luverne facility, we project capital costs of approximately $17 million to retrofit this plant to produce 18 MGPY of isobutanol. We have begun the project engineering and permitting portion of the Luverne facility retrofit process and expect to begin commercial production of isobutanol at the Luverne facility in the first half of 2012. We then plan to expand our production capacity beyond this facility to produce and sell over 350 million gallons of isobutanol in 2015.

GIFT : Our proprietary biocatalysts, fermentation and recovery process

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. Using our first-generation biocatalyst, based on a bacterial platform, we have demonstrated that we can produce isobutanol at key commercial parameters, validating our biotechnology pathways and efficiencies. We are now nearing completion of the development of our second-generation biocatalyst, which uses a yeast platform. This 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.

In addition, through an exclusive license and a services arrangement with Cargill, Incorporated, or Cargill, we are working to develop a future-generation 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 yeast 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 believe our second- and future-generation biocatalysts will be well-suited to produce isobutanol in commercial industrial settings and expect them to equal or exceed the performance of the yeast used in prevailing grain ethanol production processes.

Our proprietary integrated fermentation and recovery process provides enhanced fermentation performance as well as low cost, energy-efficient recovery of isobutanol and other alcohols. GIFT permits the continuous removal of isobutanol as it is formed, allowing our biocatalysts 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 biocatalysts, we have demonstrated that GIFT enables isobutanol fermentation times equal to, or less than that achieved in

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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. Finally, isobutanol s unique characteristics in conjunction with the GIFT system reduce energy consumption during distillation.

Our competitive strengths

- **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. 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. This approach allows us to project substantially lower capital outlays and a faster commercial deployment schedule than the construction of new plants. 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.

- **GIFT demonstrated at commercially relevant scale**. We have completed the retrofit of a 1 MGPY ethanol facility and successfully produced isobutanol at this facility using our first-generation biocatalyst, achieving our commercial targets for concentration, yield and productivity. 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 a 22 MGPY 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. A number of our strategic partners are also direct or indirect investors in 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, and have played key roles in the commercialization of several successful, large-scale industrial biotechnology projects.

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Our strategy

Our strategy is to commercialize our isobutanol for use directly as a specialty chemical and low vapor pressure 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 Luverne facility retrofit process and expect to commence commercial production of approximately 18 MGPY of isobutanol at the Luverne 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 acquisitions or joint ventures. 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 access to 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 relationships with 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 Air Lines, Inc. to purchase significant quantities of renewable jet fuel made from our isobutanol. We intend to use these relationships 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. We are 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. 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.

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Summary risk factors

Our business is subject to numerous risks and uncertainties that you should understand before making an investment decision. These risks are discussed more fully in the section entitled Risk Factors beginning on page 16 of this prospectus. These include:

- we are a development stage company and have not generated any revenues from the sale of isobutanol, and our business may fail if we are not able to successfully commercialize isobutanol and the products derived from it;
- 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 Advanced Biofuels LLC, 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;
- we have incurred losses to date, anticipate continuing to incur losses in the future and may never achieve or sustain profitability;
- we have no experience producing isobutanol at the commercial scale needed for the development of our business, and we will not succeed if we cannot produce commercial quantities of isobutanol in a timely and economic manner;
- our strategy involves accessing and retrofitting existing ethanol production facilities to produce isobutanol and we may not be able to meet the volume demands of our potential customers if we are unable to successfully identify and acquire access to facilities suitable for efficient retrofitting;
- we have no experience retrofitting commercial ethanol production facilities to produce isobutanol or operating commercial isobutanol facilities, and any unexpected delays, operational difficulties, cost-overruns or failures in the retrofit process could slow our commercial production of isobutanol and harm our performance;
- no market currently exists for isobutanol as a fuel, a fuel blendstock or a building block for the production of hydrocarbons, and our business may fail if we are unable to successfully market our isobutanol to potential customers, including refiners and chemical producers;
- we intend to market our isobutanol as a building block in the production of biofuels and biobased alternatives to petroleum-based products, and if the price of oil falls our customers may be unable to produce biobased products that are commercially viable alternatives to petroleum-based products;
- we may not be able to obtain regulatory approval for the use of our isobutanol in the fuels and chemicals markets;
- 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;
- we have agreed to preliminary terms for a number of supply and distribution agreements with future customers, however, none of these agreements are binding and our performance may suffer if we fail to successfully transition these preliminary commitments into definitive supply and distribution agreements or to negotiate sufficient long-term supply agreements for our production of isobutanol;

- we believe that our isobutanol is fully compatible with existing refinery and transportation infrastructure but if our isobutanol proves unsuitable for use in the existing infrastructure, the market adoption of our isobutanol may be adversely affected;

- fluctuations in the price of corn and other feedstocks may affect our cost structure; and

- concerns about genetically engineered products and processes, and similar concerns about feedstocks grown on land that could be used for food production, could limit our revenues.

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Industry overview

Petroleum is a fundamental source of chemicals and fuels, with annual global demand in 2008 estimated at $3.0 trillion, based on data from the IEA and the EIA. Today s organic chemicals and fuels are predominantly derived from petroleum, as it historically has 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. We believe that isobutanol and the products derived from it will 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.

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. Our website address is www.gevo.com. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be part of this prospectus.

Our logos, Gevo , GIFT and Gevo Integrated Fermentation Technology® and other trademarks or service marks of Gevo, Inc. appearing in this prospectus are the property of Gevo, Inc. This prospectus contains additional trade names, trademarks and service marks of other companies. We do not intend our use or display of other companies trade names, trademarks or service marks to imply relationships with, or endorsement or sponsorship of us by, these other companies.

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The offering

Common stock offered by Gevo	7,150,000 shares (or 8,222,500 shares if the underwriters exercise their option to purchase additional shares in full).
Common stock to be outstanding after this offering.	24,898,802 shares (or 25,971,302 shares if the underwriters exercise their option to purchase additional shares in full).
Proposed Nasdaq Global Market symbol	GEVO
Use of proceeds	We currently intend to use all or a portion of the net proceeds of this offering, together with existing cash and cash equivalents, to acquire access to ethanol facilities through direct acquisition and joint ventures, and retrofit those facilities to produce isobutanol. We completed our acquisition of Agri-Energy in September 2010, at which time Agri-Energy became a subsidiary of Gevo Development, and we do not have agreements or commitments for any other specific acquisitions at this time. A portion of the net proceeds of this offering may be used to complete the retrofit of Agri-Energy s ethanol production facility in Luverne, Minnesota. We may also use a portion of the net proceeds of this offering to fund working capital and other general corporate purposes, which may include paying off certain of our long-term debt obligations, expenses associated with litigation and the costs associated with being a public company. Please see Use of Proceeds.
Risk factors	See Risk Factors starting on page 16 of this prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock.

The number of shares of common stock to be outstanding after this offering is based on 17,748,802 shares outstanding as of December 31, 2010 and excludes:

- 2,894,265 shares of common stock issuable upon the exercise of options outstanding as of December 31, 2010 at a weighted average exercise price of $2.83 per share;
- 858,000 shares of common stock issuable upon the exercise of outstanding common stock warrants as of December 31, 2010 at an exercise price of $2.70 per share;
- 412,318 shares of common stock issuable upon the exercise of outstanding preferred stock warrants as of December 31, 2010 at a weighted average exercise price of $6.96 per share, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) (see

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Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering), and subject to adjustment to reflect the actual offering price; and

- 2,489,880 shares of common stock reserved for issuance under our 2010 stock incentive plan, which will become effective in connection with the consummation of this offering, assuming that 7,150,000 shares are sold in the offering and assuming a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) (see Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering), subject to adjustment to reflect the actual offering price.

Except as otherwise indicated, all information in this prospectus assumes:

- the conversion of all of our outstanding shares of preferred stock into 16,588,145 shares of common stock in connection with the consummation of this offering, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) (see Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering), subject to adjustment to reflect the actual offering price, and the related conversion of all outstanding preferred stock warrants into common stock warrants;

- no exercise of the underwriters option to purchase additional shares; and

- the filing of our amended and restated certificate of incorporation, which will occur in connection with the consummation of this offering.

Certain of our current stockholders, including LANXESS Corporation and Total Energy Ventures International, have indicated an interest in purchasing shares in this offering. However, the underwriters will have the discretion as to whether to sell any shares to these stockholders. In addition, there can be no assurance that these stockholders will ultimately decide to buy shares in this offering.

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Summary historical and pro forma financial data

The following table sets forth a summary of our historical consolidated financial data for the periods ended or as of the dates indicated. We have derived the consolidated statements of operations data for the years ended December 31, 2007, 2008 and 2009 from our audited consolidated financial statements appearing elsewhere in this prospectus. We have derived the consolidated statements of operations data for the nine months ended September 30, 2009 and 2010 and the consolidated balance sheet data as of September 30, 2010 from our unaudited interim consolidated financial statements appearing elsewhere in this prospectus. You should read this table together with our consolidated financial statements and the accompanying notes, Selected Consolidated Financial Data and Management s Discussion and Analysis of Financial Condition and Results of Operations appearing elsewhere in this prospectus. The unaudited interim consolidated financial statements have been prepared on the same basis as the audited annual consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to state fairly our financial position as of September 30, 2010 and results of operations for the nine months ended September 30, 2009 and 2010. The summary historical consolidated financial data in this section is not intended to replace our consolidated financial statements and the accompanying notes. Our historical results are not necessarily indicative of our future results.

The following table also sets forth summary unaudited pro forma and unaudited pro forma, as adjusted financial data. This pro forma and pro forma, as adjusted financial data is presented for informational purposes only and does not purport to represent what our consolidated results of operations or financial position actually would have been had the transactions reflected occurred on the dates indicated or to project our financial condition as of any future date or results of operations for any future period. This pro forma and pro forma, as adjusted financial data should be read together with Agri-Energy s financial statements and accompanying notes appearing elsewhere in this prospectus and Management s Discussion and Analysis of Financial Condition and Results of Operations.

Agri-Energy is engaged in the business of producing and selling ethanol and related products through an ethanol plant located in Luverne, Minnesota. We acquired Agri-Energy with the intention of retrofitting the ethanol plant to produce isobutanol. We intend to record revenue from the sale of the ethanol, distiller s grains and other related products produced as part of the ethanol production process 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 intend to 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.

Our Series A-1, Series A-2, Series A-3, Series A-4, Series B, Series C, Series D and Series D-1 preferred stock are collectively referred to as convertible preferred stock for financial reporting purposes and in the financial tables included in this prospectus, as more fully explained in Note 10 to our consolidated financial statements. In other parts of this prospectus, we refer to our Series A-1, Series A-2, Series A-3, Series A-4, Series B, Series C, Series D and Series D-1 preferred stock collectively as preferred stock. 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.

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Consolidated statements of operations data:	Year ended December 31, 2007	2008	2009	Nine months ended September 30, 2009	2010(5)	Pro forma (6) Year ended December 31, 2009	Nine months ended September 30, 2010
Revenues:							
Grant revenue	$ 275,000	$ 208,000	$ 660,000	$ 551,000	$ 1,175,000	$ 660,000	$ 1,175,000
Licensing revenue					138,000		138,000
Ethanol sales and related products					975,000	40,108,000	31,469,000
Total revenues	275,000	208,000	660,000	551,000	2,288,000	40,768,000	32,782,000
Cost of goods sold					(856,000)	(37,179,000)	(28,941,000)
Gross margin	275,000	208,000	660,000	551,000	1,432,000	3,589,000	3,841,000
Operating expenses:							
Research and development	(3,699,000)	(7,376,000)	(10,508,000)	(6,730,000)	(11,432,000)	(10,508,000)	(11,432,000)
Selling, general and administrative	(2,601,000)	(6,065,000)	(8,699,000)	(5,685,000)	(19,114,000)	(10,728,000)	(20,008,000)
Lease termination costs	(894,000)						
Loss on abandonment or disposal of assets	(243,000)	(78,000)	(22,000)	(10,000)		(22,000)	
Total operating expenses	(7,437,000)	(13,519,000)	(19,229,000)	(12,425,000)	(30,546,000)	(21,258,000)	(31,440,000)
Loss from operations	(7,162,000)	(13,311,000)	(18,569,000)	(11,874,000)	(29,114,000)	(17,669,000)	(27,599,000)
Other (expense) income:							
Interest expense	(140,000)	(1,385,000)	(1,103,000)	(798,000)	(1,448,000)	(3,123,000)	(2,957,000)
Interest and other income	76,000	154,000	277,000	247,000	96,000	347,000	251,000
Loss from change in fair value of warrant liabilities(1)			(490,000)	(400,000)	(3,302,000)	(490,000)	(3,302,000)
Other expense net	(64,000)	(1,231,000)	(1,316,000)	(951,000)	(4,654,000)	(3,266,000)	(6,008,000)
Net loss	(7,226,000)	(14,542,000)	(19,885,000)	(12,825,000)	(33,768,000)	(20,935,000)	(33,607,000)
Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock					(1,789,000)		(1,789,000)
Net loss attributable to Gevo, Inc. common stockholders	$ (7,226,000)	$ (14,542,000)	$ (19,885,000)	$ (12,825,000)	$ (35,557,000)	$ (20,935,000)	$ (35,396,000)
Net loss per share of common stock attributable to Gevo, Inc. stockholders, basic and diluted	$ (7.40)	$ (13.83)	$ (18.07)	$ (11.70)	$ (31.12)	$ (19.03)	$ (30.98)
Weighted average number of common shares used in computing net loss per share of common stock, basic and diluted	976,909	1,051,848	1,100,294	1,096,095	1,142,498	1,100,294	1,142,498
Net loss used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)(2)(3)			$ (19,395,000)		$ (30,466,000)	$ (20,445,000)	$ (30,305,000)
Pro forma net loss per share of common stock, basic and diluted (unaudited)(4)			$ (1.62)		$ (1.91)	$ (1.71)	$ (1.88)

Weighted average number of common shares used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)(4)	11,966,689	15,977,487	11,966,689	16,136,629

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(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 18 to our consolidated financial statements.
(2) Net loss used in computing pro forma basic and diluted net loss per share of common stock has been adjusted to add back losses resulting from remeasurement of the convertible preferred stock warrant liability as these measurements would no longer be required when the convertible preferred stock warrants become warrants to purchase shares of the company s common stock.
(3) Net loss used in computing pro forma basic and diluted net loss per share of common stock has been adjusted to remove the deemed dividend associated with the amortization of the beneficial conversion feature on our Series D-1 preferred stock. See Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering.
(4) Pro forma basic and diluted net loss per share of common stock and weighted average number of common shares used in computing pro forma basic and diluted net loss per share of common stock for the year ended December 31, 2009 and the nine months ended September 30, 2010 give effect to the conversion of all of our outstanding convertible preferred stock into common stock (and the related reversal of the deemed dividend associated with the beneficial conversion feature of our Series D-1 preferred stock) and the conversion of all of our preferred stock warrants into common stock warrants (and the reversal of losses resulting from remeasurement of the convertible preferred stock warrant liability as these measurements would no longer be required), in each case, upon completion of this offering, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), and subject to adjustment to reflect the actual offering price, as if such conversion has occurred at the beginning of each period or upon issuance, if later. See Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering.
(5) Since Agri-Energy was acquired on September 22, 2010, our consolidated results of operations for the nine months ended September 30, 2010 include the results of operations of Agri-Energy from September 23, 2010 to the period end date.
(6) The pro forma statement of operations data reflects the combined results of operations of the company and Agri-Energy for the year ended December 31, 2009 and the nine months ended September 30, 2010 as if the consummation of the Agri-Energy acquisition had occurred on January 1, 2009.

	As of September 30, 2010(1)		
Consolidated balance sheet data:	**Actual**	**Pro forma(2)**	**Pro forma as adjusted(3)(4)**
Cash and cash equivalents	$ 22,516,000	$ 22,516,000	$ 111,609,000
Working capital	17,461,000	17,461,000	106,554,000
Total assets	57,850,000	57,850,000	146,943,000
Convertible preferred stock warrant liability	3,003,000		
Current and long-term secured debt, net of debt discounts	20,320,000	20,320,000	20,320,000
Convertible preferred stock	146,000		
Gevo, Inc. stockholders equity	25,042,000	28,045,000	117,138,000

(1) Since Agri-Energy was acquired on September 22, 2010, our balance sheet as of September 30, 2010 includes Agri-Energy.
(2) The pro forma consolidated balance sheet data gives effect to (i) the conversion of all of our outstanding convertible preferred stock in connection with the completion of this offering, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) (see Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering), which is subject to adjustment to reflect the actual offering price and (ii) conversion of all of our warrants for convertible preferred stock into warrants for common stock and the related reclassification of convertible preferred stock warrant liability to stockholders equity upon the completion of this offering.
(3) The pro forma, as adjusted consolidated balance sheet data gives effect to the items described in footnote (2) above as well as the sale of 7,150,000 shares of common stock in this offering at an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.
(4) Each $1.00 increase or decrease in the assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) would increase or decrease, as applicable, our pro forma, as adjusted cash and cash equivalents, working capital, total assets and stockholders equity by approximately $6.65 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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Risk factors

Investing in our common stock involves a high degree of risk. You should carefully consider the following risk factors, as well as the other information in this prospectus, before deciding whether to invest in shares of our common stock. The occurrence of any of the events described below could harm our business, financial condition, results of operations and growth prospects. In such an event, the trading price of our common stock may decline and you may lose all or part of your investment.

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 $7.2 million, $14.5 million and $19.9 million in 2007, 2008 and 2009, respectively, and $33.8 million for the nine months ended September 30, 2010. As of September 30, 2010, we had an accumulated deficit of $78.0 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 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 Advanced Biofuels LLC, a joint venture between DuPont and BP for the development and marketing of isobutanol, alleging that we have infringed upon its patent relating to the production of isobutanol, may become significant (as described further in Business Legal Proceedings). 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 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 Advanced Biofuels LLC, 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

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Risk factors

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 Advanced Biofuels LLC, a joint venture between DuPont and BP to develop and market isobutanol, in which it has alleged that we have infringed its 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 Advanced Biofuels LLC. 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 Advanced Biofuels LLC.

If we are unable to fund our planned retrofit of the ethanol production facility in Luverne, Minnesota, our first commercial production of isobutanol could be delayed.

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 may require additional funding to complete the retrofit. While we anticipate that additional funding for the retrofit may be available from TriplePoint Capital, LLC, or 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 or prevent our initial commercial production of isobutanol.

There is no guarantee we will be able to maintain Agri-Energy s current revenues and profits, and Agri-Energy s financial statements will not be a strong indicator of our future earnings potential.

Because we consummated the Agri-Energy acquisition in September 2010, we have included certain financial statements of Agri-Energy in this prospectus. 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 $2.0 million for the year ended December 31, 2009. There is no guarantee that we will be able to maintain Agri-Energy s levels of revenue or profit. We plan to retrofit the Luverne 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

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Risk factors

involved with operating an ethanol production facility, Agri-Energy s financial statements 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 Luverne 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 Luverne 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 current 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 prospectus, 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. Our largest-scale isobutanol production to date was achieved with our first-generation biocatalyst at ICM s 1 MGPY demonstration facility in St. Joseph, Missouri, and we have produced only small amounts of isobutanol at our mini-plant in Englewood, Colorado with our second-generation biocatalyst. 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 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.

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Risk factors

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 acquisition, lease or joint venture. 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 an acquisition, lease or joint venture, 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 US Environmental Protection Agency, or 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

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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 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.

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Risk factors

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

We have never operated a commercial isobutanol or ethanol 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 is 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 will 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 plant scale. We are currently working to optimize our second-generation biocatalyst s performance in anticipation of its integration into the demonstration facility, 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 rises as we increase the scale of our isobutanol 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 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.

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Risk factors

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, we must receive EPA fuel certification. We are currently in the first phase of 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 renewable identification number, or 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. Approval, if ever granted, could be delayed for substantial amounts of time, which could significantly harm the development of our business and prevent the achievement of our goals.

Our isobutanol fermentation process utilizes a genetically modified organism which, when used in an industrial process, is considered a new chemical under the EPA s Toxic Substances Control Act program, or 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 International, or ASTM, and Underwriters Laboratories, Inc. 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 could have a substantial negative effect on our performance.

We are in negotiations, facilitated by the Air Transport Association of America, or ATA, with several major passenger and cargo airlines for potential commitments by several ATA member airlines to

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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, or 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 Inc., TOTAL PETROCHEMICALS USA, INC., Toray Industries, Inc., Sasol Chemical Industries Ltd. and United Air Lines, Inc. 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

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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.

We may face substantial delay in receiving US Food and Drug Administration 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.

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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, or 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 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 towards 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 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 this 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

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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 Advanced Biofuels LLC, a joint venture between DuPont and BP for the development and marketing of isobutanol, alleging that we have infringed upon its patent relating to the production of isobutanol (as described further in Business Legal Proceeding). 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.

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Risk factors

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 prospectus. Accordingly, the results of any prior quarterly or annual periods should not be relied upon as indications of our future operating performance.

If we lose our licensed intellectual property rights we may be unable to continue our business.

We are a party to certain license agreements, including with Cargill, The Regents of the University of California, or The Regents, and the California Institute of Technology, or Caltech, pursuant to which we license key intellectual property. These license agreements impose various diligence, milestone payment, royalty, insurance and other obligations on us. If we fail to comply with any of these obligations, the licensors may have the right to reduce an exclusive license of intellectual property to a nonexclusive license or to terminate the license completely, in which case our competitors may gain access to these important licensed technologies or we may be unable to develop or market products covered by the licensed intellectual property. If we lose rights that are important to our isobutanol production, our business may be materially affected. We may enter into additional licenses in the future, and if we fail to comply with obligations under those agreements, we could suffer similar consequences.

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.

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Risk factors

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.

Changes in the prices of distiller s grains could have a material adverse affect 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 distiller s grains that will be produced as a co-product of our commercial isobutanol production. Distiller s grains 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. If the price of distiller s grains decreases, our revenue from the sale of distiller s grains 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

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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:

Ø issue additional equity securities which would dilute our current stockholders;

Ø incur substantial debt to fund the acquisitions; or

Ø assume significant liabilities.

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

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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

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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 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

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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 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

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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 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 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 Products US, or Shell, 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. Du Pont De Nemours and Company, or 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, p.l.c., or BP, which has purchased Vercipia Biofuels, LLC and technology from Verenium Corporation to develop a commercial-scale cellulosic ethanol facility. Range Fuels, Inc. is also focused on developing non-biocatalytic thermochemical processes to convert cellulosic biomass into fuels, and Coskata, Inc. is developing a hybrid thermochemical-biocatalytic process to produce ethanol from a variety of feedstocks.

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

Additionally, DuPont has announced plans to develop and market isobutanol through Butamax Advanced Biofuels LLC, or 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 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

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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., or 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 Biotechnologies, Inc., or 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 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 with Lighthouse Capital Partners V, L.P., or 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 another entity, excluding Agri-Energy, 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 and The Regents may terminate our license 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

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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 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.

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Risk factors

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, or the Code, a corporation that undergoes an ownership change is subject to limitation on its ability to utilize its

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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.

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 and, in the event we become an accelerated filer, our independent registered public accounting firm 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, and our independent registered public accounting firm concurs, 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.

RISKS RELATING TO THIS OFFERING

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, both of which will become effective upon the completion of this offering, may delay or prevent an acquisition of us. Among other things, our amended and restated certificate of incorporation and bylaws will provide for a board of directors which is divided into three classes, with staggered three-year terms and will provide that all stockholder action must be effected at a duly called meeting of the stockholders and not by a consent in writing, and will 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

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Risk factors

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.

When this offering is completed, assuming the sale of 7,150,000 shares of common stock in this offering, our officers, directors and existing stockholders who hold at least 5% of our common and preferred stock as of December 31, 2010 will together control approximately 59.9% of our outstanding common stock. As of December 31, 2010, Khosla Ventures I, L.P. and its affiliates, or Khosla Ventures, Virgin Green Fund I, L.P., or Virgin Green, Total Energy Ventures International, Burrill Life Sciences Capital Fund III, L.P., or Burrill, and Malaysian Life Sciences Capital Fund Ltd., or Malaysian Capital, beneficially owned approximately 26.8%, 10.5%, 9.2%, 7.1% and 6.3% of our outstanding common stock, respectively on an as-converted basis, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), and subject to adjustment to reflect the actual offering price. See Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering. 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 share price may be volatile and you may be unable to sell your shares at or above the offering price.

The initial public offering price for our shares will be determined by negotiations between us and representatives of the underwriters and may not be indicative of prices that will prevail in the trading market. The market price of shares of our common stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- actual or anticipated fluctuations in our financial condition and operating results;
- the position of our cash and cash equivalents;
- actual or anticipated changes in our growth rate relative to our competitors;
- actual or anticipated fluctuations in our competitors operating results or changes in their growth rate;
- announcements of technological innovations by us, our partners or our competitors;

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

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Risk factors

- the entry into, modification or termination of licensing arrangements;
- the entry into, modification or termination of research, development, commercialization, supply or distribution arrangements;
- 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;
- 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 National Renewable Fuel Standard 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. If the market price of shares of our common stock after this offering does not exceed the initial public offering price, you may not realize any return on your investment in us and may lose some or all of your investment. 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. When this offering is completed, assuming the sale of 7,150,000 shares of common stock in this offering, our three largest stockholders as of December 31, 2010 will beneficially own, collectively, approximately 46.5% 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,

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2010, upon completion of this offering we will have 24,898,802 outstanding shares of common stock, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), and subject to adjustment to reflect the actual offering price, assuming no exercise of the underwriters option to purchase additional shares. This includes the 7,150,000 shares that we are selling in this offering. Of the remaining shares, 17,748,802 shares of common stock will be 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, or 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.

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 this offering, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), holders of an aggregate of approximately 17,212,463 shares of our outstanding common stock (including shares of our common stock issuable upon the exercise of outstanding options and warrants), subject to adjustment to reflect the actual offering price, will 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. See Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering.

We also intend to register approximately 5,384,145 shares of common stock that have been reserved for issuance under our stock incentive plans, assuming that 7,150,000 shares are sold in the offering and assuming a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) (see Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering), subject to adjustment to reflect the actual offering price. Once we register these shares, they 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 described in the Underwriting section of this prospectus.

No public market for our common stock currently exists and an active trading market may not develop or be sustained following this offering.

Prior to this offering, there has been no public market for our common stock. An active trading market may not develop following the completion of this offering or, if developed, may not be sustained. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. The lack of an active market may also reduce the fair market value of your shares. An inactive market may also impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to acquire other companies or technologies by using our shares as consideration.

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

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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.

Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.

The initial public offering price will be substantially higher than the tangible book value per share of shares of our common stock based on the total value of our tangible assets less our total liabilities immediately following this offering. Therefore, if you purchase shares of our common stock in this offering, you will experience immediate and substantial dilution of approximately $9.30 per share in the price you pay for shares of our common stock as compared to its tangible book value, assuming an initial public offering price of $14.00 per share (the midpoint of the price range set forth on the cover page of this prospectus). To the extent outstanding options and warrants to purchase shares of common stock are exercised, there will be further dilution. For further information on this calculation, see Dilution elsewhere in this prospectus.

We have broad discretion in the use of net proceeds from this offering and may not use them effectively.

Although we currently intend to use the net proceeds from this offering in the manner described in Use of Proceeds elsewhere in this prospectus, we will have broad discretion in the application of the net proceeds. Our failure to apply these net proceeds effectively could affect our ability to continue to develop and sell our products and grow our business, which could cause the value of your investment to decline.

We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

We have never operated as a public company. As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as related rules implemented by the Securities and Exchange Commission and The Nasdaq Stock Market, impose various requirements on public companies. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect these rules and regulations to make it more expensive for us to maintain director and officer liability insurance.

In addition, the Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, commencing in 2011, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management and our independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues. We will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, our stock price could decline, and we could face sanctions, delisting or investigations by The Nasdaq Global Market, or other material effects on our business, reputation, results of operations, financial condition or liquidity.

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Risk factors

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 agreements with Lighthouse and TriplePoint currently prohibit us from paying cash dividends on our common stock. Although the prohibition on paying dividends under Gevo, Inc. s loan and security agreement with TriplePoint terminates upon the completion of this offering, 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 Luverne facility is complete and the facility is producing commercial volumes of isobutanol, (ii) its net worth is greater than or equal to $10.0 million, and (iii) no event of default has occurred and is continuing under the agreement. 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.

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Forward-looking statements

Forward-looking statements

This prospectus contains forward-looking statements that involve risks and uncertainties. The forward-looking statements are contained principally in the sections entitled Prospectus Summary, Risk Factors, Management s Discussion and Analysis of Financial Condition and Results of Operations and Business. 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 risks and uncertainties are contained principally in the section entitled Risk Factors.

Forward-looking statements include all statements that are not historical facts. In some cases, you can identify forward-looking statements by terms such as may, will, should, could, would, expects, plans, anticipates, believes, estimates, projects, predicts, poten those terms, and similar expressions and comparable terminology intended to identify 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. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as guarantees of future events. These forward-looking statements represent our estimates and assumptions only as of the date of this prospectus and, except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this prospectus.

In particular, forward looking statements in this prospectus include statements about:

- Ø the achievement of advances in our technology platform;
- Ø the timing and cost of acquiring access to additional ethanol production facilities;
- Ø the timing and costs associated with our planned retrofits of production facilities;
- Ø our access to capital, including pursuant to those certain loan and security agreements with TriplePoint;
- Ø the acceptance and success of our capital-light model for production of our product at retrofitted ethanol plants;
- Ø the commercial scale-up of our production, including the timing and volume of our future production;
- Ø the availability of suitable and cost-competitive feedstocks;
- Ø our ability to gain market acceptance for isobutanol as a specialty chemical, fuel blendstock and raw material for the production of hydrocarbons;

- our ability to produce and sell protein fermentation meal as an animal feedstock;

- the expected applications of our platform molecule and addressable markets, including our access to distribution infrastructure and services and the availability of chemical processing;

- the expected cost-competitiveness and relative performance attributes of our isobutanol and the products derived from it;

- the timing of commercial sales of our product, including the timing and terms of final, binding supply agreements for the isobutanol that we produce;

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Forward-looking statements

- the cost of protecting intellectual property rights and/or defending against patent infringement claims, and our ability to compete in the event of an adverse outcome in any legal or administrative proceeding regarding intellectual property rights or patent infringement;

- government regulatory and industry certification, approval and acceptance of our product and its derivatives;

- government policymaking and incentives relating to renewable fuels;

- the future price and volatility of corn and other renewable feedstocks; and

- the future price and volatility of petroleum and products derived from petroleum.

This prospectus also contains estimates and other information concerning our target markets that are based on industry publications, surveys and forecasts, including those generated by SRI, CMAI, the EIA, the IEA, the RFA, and Nexant. 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.

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Use of proceeds

We estimate that we will receive net proceeds of approximately $89.1 million from the sale of 7,150,000 shares of common stock offered in this offering based on an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. A $1.00 increase (decrease) in the assumed initial public offering price of $14.00 per share would increase (decrease) the net proceeds to us from this offering by $6.65 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise their option to purchase 1,072,500 additional shares, we estimate that our net proceeds will be approximately $103.1 million based on an assumed initial public offering price of $14.00 per share.

We currently intend to use all or a portion of the net proceeds of this offering, together with existing cash and cash equivalents, to acquire access to ethanol facilities through direct acquisition and joint ventures, and retrofit those facilities to produce isobutanol. We completed our acquisition of Agri-Energy in September 2010, at which time Agri-Energy became a subsidiary of Gevo Development, and we do not have agreements or commitments for any other specific acquisitions at this time. A portion of the net proceeds of this offering may be used to complete the retrofit of Agri-Energy s ethanol production facility in Luverne, Minnesota. We may also use a portion of the net proceeds of this offering to fund working capital and other general corporate purposes, which may include paying off certain of our long-term debt obligations, expenses associated with litigation and the costs associated with being a public company.

The potential uses of net proceeds from this offering represent our current intentions based upon our present business plans and business conditions. As of the date of this prospectus, we cannot allocate specific percentages of the net proceeds that we may use to acquire access to ethanol facilities, retrofit these facilities, fund working capital and for other general corporate purposes.

Until we apply the net proceeds of this offering to its intended uses, we intend to invest the net proceeds in interest-bearing demand deposit accounts or short-term investment-grade securities. We cannot predict whether these temporary investments of the net proceeds will yield a favorable return, or any return at all.

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Dividend policy

We have never declared or paid cash dividends on shares of our common or preferred stock, and currently do not plan to declare or pay cash dividends in the foreseeable future. We expect to retain our future earnings, if any, for use in the operation and expansion of our business. In addition, the terms of our loan and security agreement with Lighthouse currently prohibit us from paying cash dividends, and the terms of Gevo, Inc. s loan and security agreement with TriplePoint prohibit us from paying cash dividends until the completion of this offering. Subject to the foregoing, the payment of cash dividends in the future, if any, will be at the discretion of our board of directors and will depend upon such factors as earnings levels, capital requirements, requirements under the Delaware General Corporation Law, restrictions and covenants pursuant to any other credit facilities we may enter into, our overall financial condition and any other factors deemed relevant by our board of directors. 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 Luverne facility is complete and the facility is producing commercial volumes of isobutanol, (ii) its net worth is greater than or equal to $10.0 million, and (iii) no event of default has occurred and is continuing under the agreement. 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.

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Capitalization

The following table sets forth our cash and cash equivalents and our capitalization as of September 30, 2010:

- on an actual basis; and
- on a pro forma basis to reflect:
  - the filing of a restated certificate of incorporation to authorize 100,000,000 shares of common stock and 5,000,000 shares of undesignated preferred stock;
  - the conversion of all of our outstanding shares of convertible preferred stock into 16,588,145 shares of common stock, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), subject to adjustment to reflect the actual offering price (see Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering), and the related conversion of all outstanding convertible preferred stock warrants to common stock warrants; and
  - the reclassification of the convertible preferred stock warrant liability to stockholders equity upon the completion of this offering; and
- on a pro forma, as adjusted basis to reflect the pro forma adjustments described above and our receipt of the estimated net proceeds from this offering, based on an assumed initial public offering of 7,150,000 shares at a price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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Capitalization

The pro forma and pro forma, as adjusted information below is illustrative only and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with Management s Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and the accompanying notes appearing elsewhere in this prospectus.

	As of September 30, 2010		
	Actual	Pro forma (unaudited)	Pro forma, as adjusted
Cash and cash equivalents	$ 22,516,000	$ 22,516,000	$ 111,609,000
Convertible preferred stock warrant liability	$ 3,003,000		
Secured long-term debt, net of current portion and debt discounts	$ 19,034,000	$ 19,034,000	$ 19,034,000
Stockholders equity:			
Convertible preferred stock, $0.01 par value per share; 15,246,000 shares authorized, 14,613,602 shares issued and outstanding, actual; no shares authorized, no shares issued and outstanding, pro forma and pro forma, as adjusted	$ 146,000		
Preferred stock, $0.01 par value per share; no shares authorized, issued and outstanding, actual; no shares authorized, no shares issued and outstanding, pro forma; 5,000,000 shares authorized, no shares issued and outstanding, pro forma, as adjusted			
Common stock, $0.01 par value per share; 30,000,000 shares authorized; 1,160,657 issued and outstanding, actual; 30,000,000 shares authorized, 17,748,802 shares issued and outstanding, pro forma; 100,000,000 shares authorized, 24,898,802 shares issued and outstanding, pro forma, as adjusted	12,000	177,000	249,000
Additional paid-in capital	102,878,000	105,862,000	194,883,000
Accumulated deficit	(77,994,000)	(77,994,000)	(77,994,000)
Total stockholders equity	$ 25,042,000	$ 28,045,000	$ 117,138,000
Total capitalization	$ 47,079,000	$ 47,079,000	$ 136,172,000

Each $1.00 increase or decrease in the assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) would increase or decrease, as applicable, our pro forma, as adjusted cash and cash equivalents, additional paid-in capital and stockholders equity by approximately $6.65 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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Capitalization

The number of shares of common stock shown as issued and outstanding in the table set forth above is based on the number of shares of our common stock outstanding as of September 30, 2010 and excludes:

- 2,894,265 shares of common stock issuable upon the exercise of options outstanding as of September 30, 2010 at a weighted average exercise price of $2.83 per share;

- 858,000 shares of common stock issuable upon the exercise of common stock warrants outstanding as of September 30, 2010 at an exercise price of $2.70 per share;

- 412,318 shares of common stock issuable upon the exercise of outstanding preferred stock warrants as of September 30, 2010 at a weighted average exercise price of $6.96 per share, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) (see Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering), subject to adjustment to reflect the actual offering price; and

- 2,489,880 shares of our common stock reserved for future issuance under our 2010 stock incentive plan, which will become effective in connection with the consummation of this offering, assuming that 7,150,000 shares are sold in the offering and assuming a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) (see Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering), subject to adjustment to reflect the actual offering price.

CONVERSION OF OUR SERIES D-1 PREFERRED STOCK

In connection with this offering, all of our outstanding preferred stock will be converted into common stock. As of September 30, 2010, there were 1,902,087 shares of Series D-1 preferred stock outstanding. There were also outstanding warrants to purchase an additional 105,140 shares of Series D-1 preferred stock at an exercise price of $17.12 per share. The shares of Series D-1 preferred stock that will be issued upon the exercise of these warrants will convert into common stock on the same terms as the shares of Series D-1 preferred stock outstanding as of September 30, 2010. In this prospectus, we have determined the conversion ratios of our preferred stock using an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), subject to adjustment to reflect the actual offering price. Due to the beneficial conversion feature of our Series D-1 preferred stock, it may convert into common stock at a different ratio than the rest of our preferred stock.

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 preferred stock of $17.12 by the conversion price of the Series D-1 preferred stock 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. However, 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 preferred stock adjusts upon the closing of an initial public offering (the offering) or a qualified financing. A qualified financing is defined as the first issuance of common stock or a new series of convertible preferred stock following the final closing of the Series D-1 financing. If the offering or qualified financing closes between January 1, 2011 and September 30, 2011, the conversion price of the Series D-1 preferred stock will be adjusted to an amount equal to 60% of the offering price per share or price per share paid by investors in a qualified financing.

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Capitalization

By way of example, the following table shows the effect of various initial public offering prices within the range set forth on the cover page of this prospectus, on the Series D-1 preferred stock conversion ratio and on our capitalization following this offering on a pro forma, as adjusted basis to reflect the applicable conversion ratio adjustments and pro forma, as adjusted assumptions set forth in the capitalization table above. The initial offering prices shown below are hypothetical and illustrative, and assume that this offering or a qualified financing is completed on or before September 30, 2011.

			On a pro forma basis as of September 30, 2010		On a pro forma, as adjusted basis as of September 30, 2010
Assumed initial offering price ($) (a)	Series D-1 preferred stock to common stock conversion price ($)(1) (b) = (a)*60%	Series D-1 preferred stock to common stock conversion ratio (c) = $17.12/(b)	Additional shares of common stock issuable as a result of the Series D-1 beneficial conversion feature(2) (d) = (e)-(1,902,087)	Total shares of common stock issuable upon conversion of the Series D-1 preferred stock(3) (e) = (c)*(1,902,087)	Total shares of common stock outstanding after this offering(4)
13.00	7.80	1:2.19487	2,272,746	4,174,833	25,197,005
13.50	8.10	1:2.11358	2,118,122	4,020,209	25,042,381
14.00	8.40	1:2.03810	1,974,543	3,876,630	24,898,802
14.50	8.70	1:1.96782	1,840,867	3,742,954	24,765,126
15.00	9.00	1:1.90222	1,716,101	3,618,188	24,640,360

(1) For purposes of the table set forth above, we have assumed that the offering or qualified financing will close between January 1, 2011 and September 30, 2011, and have therefore assumed that the conversion price of the Series D-1 preferred stock will be adjusted to an amount equal to 60% of the offering price per share or price per share paid by investors in the qualified financing.

(2) Based on a total of 1,902,087 shares of Series D-1 preferred stock outstanding as of September 30, 2010. There are also outstanding warrants to purchase an additional 105,140 shares of Series D-1 preferred stock at an exercise price of $17.12 per share. The shares of Series D-1 preferred stock that will be issued upon the exercise of these warrants will convert into common stock on the same terms as the shares of Series D-1 preferred stock outstanding as of September 30, 2010.

(3) Pursuant to our amended and restated certificate of incorporation, the number of shares of common stock that each holder of Series D-1 preferred stock will be entitled to receive upon conversion thereof will be rounded down to the nearest whole share and each holder will receive cash in lieu of any fractional share that it would otherwise be entitled to receive. For purposes of the table set forth above, the number of shares of common stock issuable to each holder upon conversion has been rounded down to the nearest whole share to eliminate such fractional shares.

(4) Excludes the following:

- 2,894,265 shares of common stock issuable upon the exercise of options outstanding as of September 30, 2010 at a weighted average exercise price of $2.83 per share;

- 858,000 shares of common stock issuable upon the exercise of warrants outstanding as of September 30, 2010 at a weighted average exercise price of $2.70 per share; and

- 412,318 shares of common stock issuable upon the exercise of preferred stock warrants outstanding as of September 30, 2010 at a weighted average exercise price of $6.96 per share, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), and subject to adjustment to reflect the actual offering price.

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Dilution

If you invest in our common stock, your interest will be diluted to the extent of the difference between the public offering price per share of our common stock and the pro forma, as adjusted net tangible book value per share of our common stock after this offering.

Our pro forma net tangible book value at September 30, 2010 was $28.0 million, or $1.58 per share of common stock. Pro forma net tangible book value per share represents total tangible assets less total liabilities (which includes the reclassification of convertible preferred stock warrant liability into additional paid-in capital upon the conversion of outstanding shares of preferred stock underlying warrants into shares of common stock), divided by the number of outstanding shares of common stock on September 30, 2010, after giving effect to the conversion of all of our outstanding convertible preferred stock into shares of our common stock in connection with the completion of this offering, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), subject to adjustment to reflect the actual offering price. See Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering. Our pro forma, as adjusted net tangible book value at September 30, 2010, after giving effect to the sale by us of 7,150,000 shares of common stock in this offering at an assumed initial public offering price of $14.00 per share and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, would have been approximately $117.1 million, or $4.70 per share. This represents an immediate increase in pro forma, as adjusted net tangible book value of $3.12 per share to existing stockholders and an immediate dilution of $9.30 per share to new investors purchasing shares of our common stock in this offering at the assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), subject to adjustment to reflect the actual offering price. The following table illustrates this per share dilution:

Assumed initial public offering price per share	$	14.00
Pro forma net tangible book value per share at September 30, 2010	1.58	
Increase in pro forma net tangible book value per share attributable to this offering	3.12	
Pro forma, as adjusted net tangible book value per share after this offering		4.70
Dilution per share to new investors	$	9.30

A $1.00 increase (decrease) in the assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) would increase (decrease) our pro forma, as adjusted net tangible book value by $6.65 million, the pro forma, as adjusted net tangible book value per share by $0.27 per share and the dilution in the pro forma net tangible book value to new investors in this offering by $0.73 per share, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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Dilution

The following table shows, as of September 30, 2010, the number of shares of common stock purchased from us, the total consideration paid to us and the average price paid per share by existing stockholders and by new investors purchasing common stock in this offering at an assumed initial public offering price of $14.00 per share, before deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares purchased		Total consideration		Average price per share
	Number	Percent	Amount	Percent	
Existing stockholders	17,748,802	71%	$ 90,692,000	48%	$ 5.11
New investors	7,150,000	29	100,100,000	52	14.00
Total	24,898,802	100.0%	$ 190,792,000	100.0%	

The table above, and the information below, assume that our existing stockholders do not purchase any shares in this offering.

A $1.00 increase (decrease) in the assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) would increase (decrease) total consideration paid by new investors, total consideration paid by all stockholders and the average price per share paid by all stockholders by $7.15 million, $7.15 million and $0.29, respectively, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and before deducting the underwriting discount and estimated offering expenses payable by us.

The discussion and tables in this section regarding dilution are based on 17,748,802 shares of common stock issued and outstanding as of December 31, 2010, which assumes the conversion of all of our preferred stock into an aggregate of 16,588,145 shares of our common stock upon the completion of this offering, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), and subject to adjustment to reflect the actual offering price (see Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering), and subject to adjustment to reflect the actual offering price, and excludes:

- 2,894,265 shares of common stock issuable upon the exercise of options outstanding as of September 30, 2010 at a weighted average exercise price of $2.83 per share;

- 858,000 shares of common stock issuable upon the exercise of common stock warrants outstanding as of September 30, 2010 at an exercise price of $2.70 per share;

- 412,318 shares of common stock issuable upon the exercise of preferred stock warrants outstanding as of September 30, 2010 at a weighted average exercise price of $6.96 per share, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) (see Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering), and subject to adjustment to reflect the actual offering price; and

- 2,489,880 shares of our common stock reserved for future issuance under our 2010 stock incentive plan, which will become effective in connection with the consummation of this offering, assuming that 7,150,000 shares are sold in the offering and assuming a Series D-1

preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price

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Dilution

range set forth on the cover page of this prospectus) (see Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering), subject to adjustment to reflect the actual offering price.

If the underwriters exercise their option to purchase additional shares in full, the following will occur:

- the number of shares of our common stock held by existing stockholders would decrease to 68.3% of the total number of shares of our common stock outstanding after this offering; and

- the number of shares of our common stock held by new investors would increase to approximately 31.7% of the total number of shares of our common stock outstanding after this offering.

To the extent that outstanding options or warrants are exercised, you will experience further dilution. If all of our outstanding options and warrants were exercised, our pro forma net tangible book value as of September 30, 2010 would have been $41.4 million, or $1.89 per share, and the pro forma, as adjusted net tangible book value after this offering would have been $130.5 million, or $4.49 per share, causing dilution to new investors of $9.51 per share.

In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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Selected historical consolidated financial data

The following selected historical consolidated financial data should be read together with our consolidated financial statements and the accompanying notes appearing elsewhere in this prospectus 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 2007, 2008 and 2009 and the consolidated balance sheet data as of December 31, 2008 and 2009 from our audited consolidated financial statements appearing elsewhere in this prospectus. The consolidated statements of operations data for 2005 and 2006 and the consolidated balance sheet data as of December 31, 2005, 2006 and 2007 have been derived from our unaudited consolidated financial statements not included in this prospectus. The consolidated statements of operations data for the nine months ended September 30, 2009 and 2010 and the consolidated balance sheet data as of September 30, 2010 are derived from our unaudited interim consolidated financial statements appearing elsewhere in this prospectus. The unaudited interim financial statements have been prepared on the same basis as the audited annual consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to state fairly our financial position as of September 30, 2010 and results of operations for the nine months ended September 30, 2009 and 2010. Operating results for the nine months ended September 30, 2010 are not necessarily indicative of the results that may be expected for the year ended December 31, 2010. 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, 2005	2006	2007	2008	2009	Nine months ended September 30, 2009	2010(5)
Revenues:							
Grant revenue	$	$ 100,000	$ 275,000	$ 208,000	$ 660,000	$ 551,000	$ 1,175,000
Licensing revenue							138,000
Ethanol sales and related products							975,000
Total revenues		100,000	275,000	208,000	660,000	551,000	2,288,000
Cost of goods sold							(856,000)
Gross margin		100,000	275,000	208,000	660,000	551,000	1,432,000
Operating expenses:							
Research and development	(161,000)	(902,000)	(3,699,000)	(7,376,000)	(10,508,000)	(6,730,000)	(11,432,000)
Selling, general and administrative	(99,000)	(328,000)	(2,601,000)	(6,065,000)	(8,699,000)	(5,685,000)	(19,114,000)
Lease termination costs			(894,000)				
Loss on abandonment or disposal of assets			(243,000)	(78,000)	(22,000)	(10,000)	
Total operating expenses	(260,000)	(1,230,000)	(7,437,000)	(13,519,000)	(19,229,000)	(12,425,000)	(30,546,000)
Loss from operations	(260,000)	(1,130,000)	(7,162,000)	(13,311,000)	(18,569,000)	(11,874,000)	(29,114,000)

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Selected consolidated financial data

Consolidated statements of operations data:	Years ended December 31, 2005	2006	2007	2008	2009	Nine months ended September 30, 2009	2010(5)
Other (expense) income:							
Interest expense	$	$	$ (140,000)	$ (1,385,000)	$ (1,103,000)	$ (798,000)	$ (1,448,000)
Interest and other income	1,000	20,000	76,000	154,000	277,000	247,000	96,000
Loss from change in fair value of warrant liabilities(1)					(490,000)	(400,000)	(3,302,000)
Other (expense) income net	1,000	20,000	(64,000)	(1,231,000)	(1,316,000)	(951,000)	(4,654,000)
Net loss	(259,000)	(1,110,000)	(7,226,000)	(14,542,000)	(19,885,000)	(12,825,000)	(33,768,000)
Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock							(1,789,000)
Net loss attributable to Gevo, Inc. common stockholders	$ (259,000)	$ (1,110,000)	$ (7,226,000)	$ (14,542,000)	$ (19,885,000)	$ (12,825,000)	$ (35,557,000)
Net loss per share of common stock attributable to Gevo, Inc. stockholders, basic and diluted	$ (0.27)	$ (1.17)	$ (7.40)	$ (13.83)	$ (18.07)	$ (11.70)	$ (31.12)
Weighted average number of common shares used in computing net loss per share of common stock, basic and diluted	944,146	950,000	976,909	1,051,848	1,100,294	1,096,095	1,142,498
Net loss used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)(2)(3)					$ (19,395,000)		$ (30,466,000)
Pro forma net loss per share of common stock, basic and diluted (unaudited)(4)					$ (1.62)		$ (1.89)
Weighted average number of common shares used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)(4)					11,966,689		16,136,629

(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 18 to our consolidated financial statements.

(2) Net loss used in computing pro forma basic and diluted net loss per share of common stock has been adjusted to remove losses resulting from remeasurement of the convertible preferred stock warrant liability as these measurements would no longer be required when the convertible preferred stock warrants become warrants to purchase shares of the company s common stock.

(3) Net loss used in computing pro forma basic and diluted net loss per share of common stock has been adjusted to remove the deemed dividend associated with the amortization of the beneficial conversion feature on our Series D-1 preferred stock.

(4) Pro forma basic and diluted net loss per share of common stock and weighted average number of common shares used in computing pro forma basic and diluted net loss per share of common stock in the table above give effect to the conversion of all of our outstanding convertible preferred stock, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), and subject to adjustment to reflect the actual offering price, for all periods presented as if such conversion has occurred at the beginning of each period or upon issuance, if later. See Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio

adjustments that may be applicable upon future events, such as the completion of an initial public offering or qualified financing.

(5) Since Agri-Energy was acquired on September 22, 2010, our consolidated results of operations for the nine months ended September 30, 2010 include the results of operations of Agri-Energy from September 23, 2010 to the period end date.

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Selected consolidated financial data

	As of December 31,					As of September 30,
Consolidated balance sheet data:	**2005**	**2006**	**2007**	**2008**	**2009**	**2010(1)**
Cash and cash equivalents	$ 183,000	$ 1,005,000	$ 63,000	$ 9,635,000	$ 21,240,000	$ 22,516,000
Total assets	228,000	1,776,000	2,391,000	13,094,000	26,383,000	57,850,000
Fair value of warrant liabilities					982,000	3,003,000
Secured long-term debt, including current portion, net of debt discounts			1,579,000	8,178,000	7,701,000	20,320,000
Total liabilities	44,000	205,000	3,029,000	9,936,000	11,300,000	32,808,000
Accumulated deficit	(259,000)	(1,369,000)	(8,595,000)	(23,137,000)	(42,437,000)	(77,994,000)
Total stockholders equity (deficit)	184,000	1,571,000	(638,000)	3,158,000	15,083,000	25,042,000

(1) Since Agri-Energy was acquired on September 22, 2010, our balance sheet as of September 30, 2010 includes Agri-Energy.

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Unaudited pro forma condensed consolidated combined financial information

The following unaudited pro forma condensed consolidated combined statements of operations have been prepared to give effect to our acquisition of Agri-Energy, using the acquisition method of accounting with the assumptions and adjustments described in the accompanying notes to the unaudited pro forma condensed consolidated combined statements of operations. The unaudited pro forma condensed consolidated combined statements of operations reflect the combined results of operations of the company and Agri-Energy for the year ended December 31, 2009 and the nine months ended September 30, 2010, in both cases as if the transactions contemplated by the Agri-Energy acquisition agreement had occurred on January 1, 2009. There were no transactions between the company and Agri-Energy during the periods presented. There are no significant differences between the accounting policies of the company and Agri-Energy.

On September 22, 2010, we completed the acquisition of Agri-Energy pursuant to which we purchased all of the outstanding units of Agri-Energy, LLC and certain operating assets of Agri-Energy Limited Partnership. Pursuant to the acquisition agreement, we paid an aggregate purchase price comprised of $20,685,000 in cash plus the purchase of working capital totaling $4,919,000 (based on an estimate of actual working capital amounts at September 22, 2010). The purchase price was allocated to the following: property, plant and equipment of $20,685,000 and working capital of $4,919,000. We paid the aggregate purchase price with available cash reserves and by borrowing $12,500,000 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).

Agri-Energy is engaged in the business of producing and selling ethanol and related products through an ethanol plant located in Luverne, Minnesota. We acquired Agri-Energy with the intention of retrofitting the ethanol plant to produce isobutanol. We intend to record revenue from the sale of the ethanol, distiller s grains and other related products produced as part of the ethanol production process 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 intend to 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.

The unaudited pro forma condensed consolidated combined statements of operations presented are based on the assumptions and adjustments described in the accompanying notes. The unaudited pro forma condensed consolidated combined statements of operations are prepared for illustrative purposes only and are not necessarily indicative of the results of operations that would have actually been reported had the acquisitions described above occurred on January 1, 2009 nor are they necessarily indicative of the future results of operations of the combined company. The unaudited pro forma condensed consolidated combined statements of operations include adjustments which are based on preliminary estimates to reflect the allocation of the purchase price to the acquired assets and assumed liabilities of Agri-Energy. Final purchase accounting adjustments for Agri-Energy may differ materially from the pro forma adjustments presented here.

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Unaudited pro forma condensed consolidated combined financial information

These unaudited pro forma condensed consolidated combined statements of operations are based upon our historical consolidated financial statements and the historical combined financial statements of Agri-Energy, and should be read together with the company s and Agri-Energy s respective financial statements and accompanying notes appearing elsewhere in this prospectus and Management s Discussion and Analysis of Financial Condition and Results of Operations.

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Unaudited pro forma condensed consolidated combined financial information

GEVO, INC.

UNAUDITED PRO FORMA CONDENSED CONSOLIDATED COMBINED STATEMENT OF OPERATIONS

For the Year Ended December 31, 2009

Condensed consolidated combined statements of operations data:	Gevo	Agri-Energy	Adjustments for acquisition(1)	Pro forma condensed consolidated combined(1)
Revenues:				
Product revenue	$	$ 40,108,000	$	$ 40,108,000
Grant revenue	660,000			660,000
Total revenues	$ 660,000	$ 40,108,000	$	$ 40,768,000
Operating expenses:				
Cost of goods sold		(36,985,000)	(194,000)(2)	(37,179,000)
Research and development	(10,508,000)			(10,508,000)
Selling, general and administrative	(8,699,000)	(2,029,000)		(10,728,000)
Loss on abandonment or disposal of assets	(22,000)			(22,000)
Total operating expenses	(19,229,000)	(39,014,000)	(194,000)	(58,437,000)
Loss from operations	(18,569,000)	1,094,000	(194,000)	(17,669,000)
Other (expense) income:				
Minnesota producer payment		934,000(3)	(934,000)(3)	
Interest expense	(1,103,000)	(145,000)	(1,875,000)(4)	(3,123,000)
Interest and other income	277,000	70,000		347,000
Loss from change in fair value of warrant liabilities	(490,000)			(490,000)
Other (expense) income net	(1,316,000)	859,000	(2,809,000)	(3,266,000)
Income taxes			(5)	
Net (loss) income attributable to Gevo, Inc. common stockholders	$ (19,885,000)	$ 1,953,000	$ (3,003,000)	$ (20,935,000)
Net loss per share of common stock attributable to Gevo, Inc. stockholders, basic and diluted	$ (18.07)			$ (19.03)
Weighted average number of common shares used in computing net loss per share of common stock, basic and diluted	1,100,294			1,100,294

(1)

The adjustments for acquisition and the pro forma condensed consolidated combined columns reflect the combined results of operations of the company and Agri-Energy for the year ended December 31, 2009 as if the transactions contemplated by the acquisition agreement with Agri-Energy had occurred on January 1, 2009.

(2) Represents incremental depreciation expense of $194,000 for the year ended December 31, 2009 based on the fair value of acquired property, plant and equipment.

(3) Agri-Energy has been receiving incentives to produce ethanol from the State of Minnesota that are reported in the historical financial statements as Minnesota producer payments, and relate to ethanol sold prior to December 31, 2008. Any producer payments received after consummation of the acquisition will be remitted to CORN-er Stone Farmers Cooperative.

(4) Interest expense on funds borrowed for the acquisition of Agri-Energy at 13% interest, the interest payable under the agreement, plus a portion of the final payment of 8% of the borrowed funds. See Note 7 of our consolidated financial statements.

(5) State income taxes projected as payable in Minnesota on Agri-Energy s operations based on a corporate state income tax rate of 8.9%. Agri-Energy had previously been structured as a pass through entity for federal and state income tax purposes. Accordingly, no income tax expense was recognized in the audited financial statements. No adjustment was made for the year ended December 31, 2009 due to the net loss reported, as adjusted, for the period.

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Unaudited pro forma condensed consolidated combined financial information

UNAUDITED PRO FORMA CONDENSED CONSOLIDATED COMBINED STATEMENT OF OPERATIONS

For the Nine Months Ended September 30, 2010

Condensed consolidated combined statements of operations data:	Gevo(1)	Agri-Energy(1)	Adjustments for acquisition(1)	Pro forma condensed consolidated combined(1)
Revenues:				
Product revenue	$ 975,000	$ 30,494,000	$	$ 31,469,000
Government grant revenue	1,175,000			1,175,000
Licensing revenue	138,000			138,000
Total revenues	$ 2,288,000	$ 30,494,000	$	$ 32,782,000
Operating expenses:				
Cost of goods sold	(856,000)	(27,827,000)	(258,000)(2)	(28,941,000)
Research and development	(11,432,000)			(11,432,000)
Selling, general and administrative	(19,114,000)	(894,000)		(20,008,000)
Total operating expenses	(31,402,000)	(28,721,000)	(258,000)	(60,381,000)
Income (loss) from operations	(29,114,000)	1,773,000	(258,000)	(27,599,000)
Other (expense) income:				
Minnesota producer payments		2,494,000(3)	(2,494,000)(3)	
Interest expense	(1,448,000)	(103,000)	(1,406,000)(4)	(2,957,000)
Interest and other income	96,000	155,000		251,000
Loss from change in fair value of warrant liabilities	(3,302,000)			(3,302,000)
Other (expense) income net	(4,654,000)	2,546,000	(3,900,000)	(6,008,000)
Income taxes			(5)	
Net (loss) income	(33,768,000)	4,319,000	(4,158,000)	(33,607,000)
Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock	(1,789,000)			(1,789,000)
Net (loss) income attributable to Gevo, Inc. common stockholders	$ (35,557,000)	$ 4,319,000	$ (4,158,000)	$ (35,396,000)
Net loss per share of common stock attributable to Gevo, Inc. stockholders, basic and diluted	$ (31.12)			$ (30.98)
Weighted average number of common shares used in computing net loss per share of common stock, basic and diluted	1,142,498			1,142,498

(1) The adjustments for acquisition and pro forma condensed consolidated combined columns reflect the combined results of operations of the company and Agri-Energy for the nine months ended September 30, 2010 as if the transactions contemplated by the acquisition agreement with Agri-Energy had occurred

on January 1, 2009. The column titled Gevo includes the results of Agri-Energy after September 22, 2010, the date of our acquisition of Agri-Energy, as these results are reflected in our consolidated statement of operations. The column titled Agri-Energy includes the results of Agri-Energy for the period from January 1, 2010 through September 22, 2010.

(2) Represents incremental depreciation expense of $258,000 for the nine months ended September 30, 2010 based on the fair value of acquired property, plant and equipment.

(3) Agri-Energy has been receiving incentives to produce ethanol from the State of Minnesota that are reported in the historical financial statements as Minnesota producer payments, and relate to ethanol sold prior to December 31, 2008. Any producer payments received after consummation of the acquisition will be remitted to CORN-er Stone Farmers Cooperative.

(4) Represents interest expense on funds borrowed for the acquisition of Agri-Energy at 13% interest, the interest payable under the agreement, plus a portion of the final payment of 8% of the borrowed funds. See Note 7 of our consolidated financial statements.

(5) State income taxes projected as payable in Minnesota on Agri-Energy s operations based on a corporate state income tax rate of 8.9%. Agri-Energy had previously been structured as a pass through entity for federal and state income tax purposes. Accordingly, no income tax expense was recognized in the audited financial statements. No adjustment was made for the nine months ended September 30, 2010 due to the net loss reported, as adjusted, for that period.

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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 prospectus. 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 prospectus, 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. 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. 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 market adoption barriers.

Our technology platform consists of proprietary biocatalysts and a proprietary isobutanol separation unit. Together these technologies form the Gevo Integrated Fermentation Technology®. 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, that 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 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 refining, specialty chemicals and transportation sectors both in the US and internationally, we plan to secure access to additional and larger scale existing ethanol production facilities through direct acquisitions or joint ventures. 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 and 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. We plan to acquire additional production capacity to enable us to produce and sell over 350 million gallons of isobutanol in 2015.

In September 2009, Gevo, Inc. formed Gevo Development, LLC, or Gevo Development, as a 90% 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 either through direct acquisition or joint venture. In September 2010, Gevo, Inc. acquired the remaining 10% of the outstanding equity interests of Gevo Development, from CDP Gevo, LLC, or CDP, a Texas limited liability company, pursuant to an equity purchase agreement. Gevo, Inc. currently owns 100% of the outstanding equity interests of Gevo Development as a wholly owned subsidiary.

At September 30, 2010, we were considered to be in the development stage as our primary activities since inception have been conducting research and development activities, establishing our facilities, recruiting

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personnel, business development, business and financial planning, and raising capital. Successful completion of our research and development program, 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, and ultimately, the attainment of profitable operations are dependent upon future events, including completion of our development activities resulting in commercial products and/or technology, achieving 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. 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, we issued a total of 1,902,087 shares of Series D-1 preferred stock at $17.12 per share for $32,564,000.

Exclusive supply agreement with LANXESS

On January 14, 2011, we entered into an exclusive supply agreement with LANXESS Inc. pursuant to which LANXESS Inc. has granted us an exclusive first right to supply LANXESS Inc. and its affiliates with certain of their requirements of bio-based isobutanol during the term. Our exclusive first right to supply bio-based isobutanol to LANXESS Inc. 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, see Business Production and Distribution below for additional information on the proposed terms of the supply agreement. Additionally, pursuant to the terms of the exclusive supply agreement we have granted LANXESS Inc., subject to certain exceptions and conditions, an exclusive right to acquire our bio-based isobutanol to (a) produce isobutylene and butenes for use and sale in the field of chemicals, (b) produce butadiene and isobutylene for use in the production of polybutadiene and butyl rubber, and (c) produce isobutylene for use in the production of polyisobutylene. The initial term of the mutual exclusivity is ten years, subject to mutual extension.

Please see the section entitled Certain Relationships and Related Party Transactions for additional information.

Agri-Energy acquisition

In August 2010, we entered into an acquisition agreement with Agri-Energy. In September 2010, we closed the transactions contemplated by the acquisition agreement, and 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 $20.7 million. In addition, we acquired and paid for $4.9 million in estimated working capital. The purchase price was allocated to the following: property, plant and equipment of $20.7 million and working capital of $4.9 million. 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 Luverne facility retrofit process. The Luverne facility is a traditional dry-mill facility, which means that it uses dry-milled corn as a feedstock. Based on ICM s initial evaluation of the Luverne facility, we project capital costs of approximately $17 million to retrofit this plant to produce isobutanol. We expect to incur additional costs of approximately $5 million related

to the retrofit that are unique to the Luverne facility, including costs associated with the construction of a seed train and equipment and storage tanks that are designed to allow switching between isobutanol and ethanol production, bringing the total projected cost to approximately $22 million. We expect to begin commercial production of isobutanol at the Luverne 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 will record revenue from the sale of the ethanol, distiller s grains and other related products produced as part of the ethanol production process 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 intend to 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 are developing and will implement a risk management strategy focused on securing favorable operating margins. We will 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 Agri-Energy. We will also seek to create offsetting positions by using a combination of derivative instruments, fixed-price purchases and sales contracts or a combination of strategies within strict limits. Our primary focus will not be 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.

Agri-Energy comparison of years ended December 31, 2008 and 2009

During the years ended December 31, 2008 and 2009, Agri-Energy reported total revenues of $50,906,000 and $40,108,000, respectively. Revenues included ethanol, E-85, distiller s grains and other related products. The higher revenue reported for the year ended December 31, 2008 compared to the year ended December 31, 2009 was driven by higher ethanol, E-85 and distiller s grains sales. Ethanol sales included in revenue were $40,706,000 of total revenues for the year ended December 31, 2008 compared to $32,918,000 for the year ended December 31, 2009 primarily reflecting a higher selling price per gallon of approximately 15% during fiscal year 2008 combined with approximately 5% more total gallons sold. Distiller s grains revenue for the year ended December 31, 2008 was $7,756,000 compared to $6,527,000 for the year ended December 31, 2009, primarily reflecting the higher average cost per bushel of corn in 2008. The cost to acquire corn is a significant factor in establishing the selling price of distiller s grains. In addition, E-85 sales were $2,338,000 in the year 2008 compared to $556,000 in the year 2009 due to the termination of a distribution arrangement for that product.

Agri-Energy reported a gross loss of $10,460,000 for the year ended December 31, 2008 compared to a gross margin for the year ended December 31, 2009 of $3,123,000. The improved gross margin in 2009 was driven by the decrease of approximately 40% per bushel in the average cost to acquire corn compared to the year 2008. Corn is the most significant cost component in the production of ethanol

and distiller s grains. Additional cost savings were achieved as a result of a significant decrease in the cost of natural gas, also a significant cost component in the production of ethanol and distiller s grains, which was significantly lower in the year 2009 compared to the year 2008.

Selling, general and administrative expenses in fiscal year 2008 were $1,181,000 compared to $2,029,000 for the year 2009. The higher selling, general and administrative expenses in the year 2009 resulted from Agri-Energy s write-off of a receivable from Aventine Renewable Energy (ARE) in the amount of $1,006,000. ARE, the previous ethanol marketing firm for Agri-Energy, declared bankruptcy. Prior to the bankruptcy, Agri-Energy had filed suit against ARE for failure to pay for ethanol shipped to ARE in February 2009. The reserved account receivable from ARE of $1,440,000, which represents ethanol shipped to ARE in February 2009, remains in question as bankruptcy proceedings have commenced and the lawsuit has been placed on hold by the court. The unreserved balance receivable from ARE reflects management s estimate of the amount that could be collected from third parties that are interested in acquiring the company s receivable from ARE based on written offers or the amount that would be collected through the bankruptcy proceedings. The claims related to the ARE receivable were excluded from Gevo Development s acquisition of Agri-Energy and remain the property of CORN-er Stone Farmers Cooperative.

Other income, net of interest expense, was $2,275,000 for the year ended December 31, 2008 compared to $859,000 for the year ended December 31, 2009. Other income, net for each of these years, includes an incentive payment from the State of Minnesota based on the number of gallons of ethanol produced during the first ten years of Agri-Energy s operation. Although the required time-frame for operation has been completed, the State of Minnesota continues to make payments due to prior year underfunding. The State of Minnesota will annually make payments if and when funds are made available. Agri-Energy recognized income from these payments as they were received. Incentive income of $2,085,000 and $934,000 was recorded under this program for the years ended December 31, 2008 and 2009, respectively. The claims related to these producer payments were excluded from Gevo Development s acquisition of Agri-Energy and remain the property of CORN-er Stone Farmers Cooperative.

After accounting for the items described above, Agri-Energy reported a net loss of $9,366,000 for the year ended December 31, 2008 compared to net income of $1,953,000 for the year ended December 31, 2009.

Agri-Energy comparison of six months ended June 30, 2009 and 2010

In September 2010, we acquired a 22 MGPY ethanol production facility in Luverne, Minnesota from Agri-Energy. Accordingly, Agri-Energy has not prepared stand alone financial statements for the quarter ended September 30, 2010. The results of Agri-Energy subsequent to closing the transaction are included in our consolidated results of operations discussed separately below.

During the six months ended June 30, 2009 and 2010, Agri-Energy reported total revenues of $17,905,000 and $20,017,000 respectively. Revenues included ethanol, E-85, distiller s grains and other related products. The lower revenue reported for the six months ended June 30, 2009 compared to the six months ended June 30, 2010 resulted primarily from lower ethanol and distiller s grains sales. Ethanol sales included in revenue were $14,008,000 for the six months ended June 30, 2009 compared to $16,882,000 for the six months ended June 30, 2010, primarily reflecting an approximately 9% lower average selling price per gallon of ethanol during the six months ended June 30, 2009 year combined with approximately 10% fewer gallons sold. Distiller s grains sales for the six months ended June 30, 2009 were $3,601,000 compared to $2,883,000 for the six months ended June 30, 2010.

Agri-Energy reported a gross loss of $1,349,000 for the six months ended June 30, 2009 compared to a gross margin of $1,108,000 for the six months ended June 30, 2010. The increased gross margin in the

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2010 period was driven by a decrease of approximately 13% per bushel in the average cost to acquire corn compared to the 2009 period. Corn is the most significant cost component in the production of ethanol and distiller s grains.

Selling, general and administrative expenses in the six months ended June 30, 2009 were $1,482,000 compared to $565,000 for the six months ended June 30, 2010. The higher selling, general and administrative expenses in the six months ended June 30, 2009 result from Agri-Energy s write-off of a receivable from ARE in the amount of $1,006,000 following ARE declaring bankruptcy.

Other expense, including interest expense, was $27,000 for the six months ended June 30, 2009 compared to other income, net of interest expense, of $66,000 for the six months ended June 30, 2010.

After accounting for the items described above, Agri-Energy reported a net loss of $2,858,000 for the six months ended June 30, 2009 compared to net income of $609,000 for the six months ended June 30, 2010.

The combined financial statements of Agri-Energy were prepared in connection with the acquisition of Agri-Energy by Gevo Development, a subsidiary of Gevo, Inc. The combined financial statements and related notes present the financial position, results of operations and cash flows and changes in net parent investment of Agri-Energy, LLC and certain assets and liabilities of Agri-Energy Limited Partnership. Agri-Energy, LLC was a wholly owned subsidiary of CORN-er Stone Farmers Cooperative, or Cooperative, which is a cooperative association. Agri-Energy Limited Partnership is a limited partnership. The .01% general partnership interest of Agri-Energy Limited Partnership is held by CORN-er Stone Ethanol Management, Inc. which is a wholly owned subsidiary of the Cooperative. The 99.99% limited partnership interest of Agri-Energy Limited Partnership is under common ownership with the Cooperative. The assets, liabilities and operations of Agri-Energy Limited Partnership, which were not acquired by Gevo Development and are not included in these combined financial statements, include equity method investments held by Agri-Energy Limited Partnership, a note receivable arising from the sale of equity method investments and debt and related accounts used to finance the purchase of equity method investments. These investments were not managed or operated by Cooperative or Agri-Energy Limited Partnership management. Accordingly, changes in net parent investment represent net investments reported in the acquired entity to support acquired operations. Amounts recorded for services rendered by other entities owned by the Cooperative are recorded as due to related party in Agri-Energy s combined financial statements.

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 also derive revenue from the sale of the 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, isobutanol 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. Ethanol and related products are generally shipped free on board shipping point.

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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 direct labor, materials and certain plant overhead costs. Direct labor includes compensation of non-management personnel involved in the operation of the ethanol plant. Direct materials consist of the costs of corn feedstock, denaturant and process chemicals. 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 generally 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.

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. After completion of this offering, we anticipate incurring a significant increase in selling, general and administrative expense as we incur 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 record selling, general and administrative expenses for the operations of the Luverne facility that include administrative and oversight, labor, insurance, property taxes 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.

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While our significant accounting policies are more fully described in Note 1 to our consolidated financial statements included in this prospectus, 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

Effective January 1, 2006, we adopted the provisions of Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 718, *Compensation Stock Compensation*. Prior to January 1, 2006 we did not grant any share based awards. Compensation costs related to all equity instruments granted after January 1, 2006 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 increase 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 September 30, 2010 with their exercise prices, the fair value of the underlying common stock and the intrinsic value per share, if any:

Date of issuance	Number of options	Exercise price per share	Fair value	Intrinsic value
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 8, 2010	357,104	$ 10.07	$ 10.07	
June 24, 2010	24,826	$ 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 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.

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The fair value of stock options granted in the years ended December 31, 2008 and 2009, and for the nine months ended September 30, 2010, were estimated using the following assumptions:

	Options granted in year 2008	Options granted in year 2009	Options granted during the nine months ended September 30, 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. Of these amounts, $101,000 was recorded as selling, general and administrative expense while $106,000 was recorded as a research and development expense. 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. Of these amounts, $671,000 was recorded as selling, general and administrative expense while $274,000 was recorded as a research and development expense. In the nine months ended September 30, 2009 and 2010, we recognized a total of $258,000 and $10,024,000 in stock-based compensation expense, respectively, of which $149,000 and $2,045,000, respectively, was attributable to employee stock options and $109,000 and $227,000, respectively, was attributable to nonemployee stock options and restricted stock, and $0 and $7,752,000, respectively, was attributable to the warrant issued to CDP and the purchase of the 10% minority interest in Gevo Development from CDP. Of this total amount for the nine months ended September 30, 2009 and 2010, $138,000 and $9,507,000, respectively, was recorded as selling, general and administrative expense, while $120,000 and $517,000, respectively, was recorded as a research and development expense. Generally our stock options vest over four years. 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 the second quarter of 2010, we granted options to purchase 381,930 shares of common stock at a price of $10.07 per share. During the third quarter of 2010, we granted options to purchase 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, $1,198,000 and $7,000 in the fourth quarter of 2009, the second quarter of 2010, and the third quarter of 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:

Ø the nature and history of our business;

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- 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;
- 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 the Series D-1 preferred stock financing, at August 31, 2010 and at September 30, 2010. We used an option-pricing method, as well as other factors outlined above, to estimate the fair value of our common stock as follows:

Valuation date	Fair value per share
September 30, 2007	$ 0.49
March 13, 2008	1.16
August 31, 2009	2.70

March 31, 2010	10.07
August 31, 2010	12.67
September 30, 2010	18.97

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.

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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 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 (IPO), 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 IPO 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.

No single event caused the valuation of our common stock to increase from January 2008 to September 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.

- 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 in late December 2009 through May 2010 and our entering into a number of letters of interest with potential future customers in the period from January 2010 to May 2010.

- 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 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.

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 are exercisable into preferred stock are accounted for as derivatives and recognized in the 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 were recorded as a derivative liability since their dates of issuance. We determined that this treatment was appropriate because the preferred stock underlying the warrants has 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 September 30, 2010, the fair value of preferred stock warrants was estimated to be $982,000 and $3,003,000, respectively, using an option-pricing model. We recorded a $490,000 non-cash charge related to the change in fair value of preferred stock warrants for the year ended December 31, 2009, and $400,000 and $3,302,000, for the nine months ended September 30,

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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 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 are converted to common stock warrants. The warrants do not trade in an active market, and as such, we estimated the fair value of these warrants using an option-pricing model with the following assumptions:

	January 1, 2009	December 31, 2009	September 30, 2010
Risk-free interest rate	1.00%	1.14%	0.15%
Expected volatility factor	67.50%	91.60%	49.14%
Expected time to a liquidity event (in years)	3	2	0.17

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 105,140 shares our Series D-1 preferred stock in the aggregate with an exercise price of $17.12 per share, or shares of preferred stock issued in the next round of financing, if the price per share in such financing would be below $17.12, at an exercise price equal to the per share sales price in such financing. 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 September 30, 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 IPO, 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 IPO 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 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 four months, a risk-free discount rate of 0.15% and a volatility input of 49.14% based upon two months of data from a set of comparable public company stocks.

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.

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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 September 30, 2010.

Type of preferred stock warrants	Year(s) of issuance	Number of warrant shares originally granted	Number of warrant shares outstanding at September 30, 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 September 30, 2010 (unaudited)
Series A-3 preferred stock warrant	2006, 2007	15,000	15,000	$ 1.75	$ 18,000	$ 30,000	$ 68,000	$ 258,000
Series A-4 preferred stock warrant	2007, 2008	15,021	15,021	2.33	27,000	27,000	65,000	250,000
Series C preferred stock warrant	2008, 2009	113,012(1)	113,012	5.48	432,000	118,000	356,000	1,525,000
Series C preferred stock warrant	2008	108,076(1)	0	5.48	398,000	114,000	341,000	
Series D preferred stock warrant	2009	55,000	55,000	7.04	202,000		152,000	656,000
Series D-1 preferred stock warrant	2010	105,140	105,140	17.12	177,000			314,000
		411,249	303,173		$ 1,254,000	$ 289,000	$ 982,000	$ 3,003,000

(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 September 30, 2010.

Upon the closing of this initial public offering and the conversion of the underlying preferred stock to common stock, all outstanding warrants to purchase shares of preferred stock will convert 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 (the offering) or a qualified financing. A qualified financing is defined as the first issuance of common stock or a new series of convertible preferred stock by us following the final closing of the Series D-1 financing. If the 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 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 does not occur 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.

Because the conversion ratio adjustments described above are unique to the Series D-1 preferred, the Series D-1 preferred is 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 does not occur by September 30, 2011). On the basis of this comparison, the company has 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. Unless the Series D-1 preferred stock is converted into common stock prior to September 30, 2011, the discount will be amortized to retained earnings and additional paid-in-capital during the period from March 26, 2010 to September 30, 2011. In the event an initial public offering, qualified financing, or merger or asset sale closes on or prior to September 30, 2011, the beneficial conversion feature will be recalculated using the adjusted conversion ratio applied against the original commitment-date estimated fair value of the underlying common stock. If the amortized amount of the beneficial conversion feature resulting from the initial measurement of the intrinsic value before the event exceeds the re-measured intrinsic value, the excess amortization charge will not be reversed and any unamortized discount will be reversed.

In the event that this offering closes on or before September 30, 2011, the Series D-1 preferred stock will convert to common stock at a rate of 2.03810 shares of common stock for each share of Series D-1 preferred stock, based on a Series D-1 preferred stock conversion price that is 60% of an assumed initial public offering price of $14.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), and subject to adjustment to reflect the actual offering price. See Capitalization Conversion of our Series D-1 Preferred Stock for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering.

Revenue recognition

Prior to our acquisition of Agri-Energy on September 22, 2010, substantially all of our revenue related to government research grants and cooperative agreements. Revenue under these 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. We expect the revenue from research grants and cooperative agreements will continue through at least the next twelve months.

After consummation of the Agri-Energy acquisition, we began recording 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.

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Intercompany revenues are eliminated on a consolidated basis for reporting purposes. There were no intercompany revenues to eliminate through September 30, 2010.

Cost of goods sold

Cost of goods sold includes costs for direct labor, materials and certain plant overhead costs. Direct labor includes compensation of non-management personnel involved in the operation of the ethanol plant. Direct materials consist of the costs of corn feedstock, denaturant and process chemicals. 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 generally 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 Agri-Energy subsidiary, 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 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.

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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) through September 30, 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 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 on a sustained basis, 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.

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.

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RESULTS OF OPERATIONS

The following table sets forth our consolidated results of operations for the periods shown:

	Year ended December 31,			Nine months ended September 30,	
Consolidated statements of operations data:	**2007**	**2008**	**2009**	**2009**	**2010**
Revenues:					
Granted revenue	$ 275,000	$ 208,000	$ 660,000	$ 551,000	$ 1,175,000
Licensing revenue					138,000
Ethanol sales and related products					975,000
Total revenues	275,000	208,000	660,000	551,000	2,288,000
Cost of goods sold					(856,000)
Gross margin	275,000	208,000	660,000	551,000	1,432,000
Operating expenses:					
Research and development	(3,699,000)	(7,376,000)	(10,508,000)	(6,730,000)	(11,432,000)
Selling, general and administrative	(2,601,000)	(6,065,000)	(8,699,000)	(5,685,000)	(19,114,000)
Lease termination costs	(894,000)				
Loss on abandonment or disposal of assets	(243,000)	(78,000)	(22,000)	(10,000)	
Total operating expenses	(7,437,000)	(13,519,000)	(19,229,000)	(12,425,000)	(30,546,000)
Loss from operations	(7,162,000)	(13,311,000)	(18,569,000)	(11,874,000)	(29,114,000)
Other (expense) income:					
Interest expense	(140,000)	(1,385,000)	(1,103,000)	(798,000)	(1,448,000)
Interest and other income	76,000	154,000	277,000	247,000	96,000
Loss from change in fair value of warrant liabilities			(490,000)	(400,000)	(3,302,000)
Other expense net	(64,000)	(1,231,000)	(1,316,000)	(951,000)	(4,654,000)
Net loss	(7,226,000)	(14,542,000)	(19,885,000)	(12,825,000)	(33,768,000)
Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock					(1,789,000)
Net loss attributable to Gevo, Inc. common stockholders	$ (7,226,000)	$ (14,542,000)	$ (19,885,000)	$ (12,825,000)	$ (35,557,000)

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Comparison of nine months ended September 30, 2009 and 2010

The following table shows the amounts of the listed items from our consolidated statements of operations for the periods presented, showing period-over-period changes:

	Nine months ended September 30,		$ Increase	
	2009	2010	(decrease)	% Change
Revenues:				
Grant revenue	$ 551,000	$ 1,175,000	$ 624,000	113%
Licensing revenue		138,000	138,000	N/A
Ethanol sales and related products		975,000	975,000	N/A
Total revenues	551,000	2,288,000	1,737,000	315%
Cost of goods sold		(856,000)	(856,000)	N/A
Gross margin	551,000	1,432,000	881,000	160%
Operating expenses:				
Research and development	(6,730,000)	(11,432,000)	4,702,000	70%
Selling, general and administrative	(5,685,000)	(19,114,000)	13,429,000	236%
Loss on abandonment or disposal of assets	(10,000)		(10,000)	(100%)
Total operating expenses	(12,425,000)	(30,546,000)	18,121,000	146%
Loss from operations	(11,874,000)	(29,114,000)	17,240,000	145%
Other (expense) income:				
Interest expense	(798,000)	(1,448,000)	650,000	81%
Interest and other income	247,000	96,000	(151,000)	(61%)
Loss from change in fair value of warrant liabilities	(400,000)	(3,302,000)	2,902,000	726%
Other expense net	(951,000)	(4,654,000)	3,703,000	389%
Net loss	(12,825,000)	(33,768,000)	20,943,000	163%
Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock		(1,789,000)	1,789,000	N/A
Net loss attributable to Gevo, Inc. common stockholders	$ (12,825,000)	$ (35,557,000)	$ 22,732,000	177%

Revenues: The increase in grant revenue of $624,000, or 113%, 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 ethanol sales and related products of $975,000 is due to our acquisition of Agri-Energy that occurred on September 22, 2010. The increase in licensing revenue of $138,000 relates to our licensing of Clostridia strains to a company in the business of producing n-butanol through fermentation.

Cost of goods sold and gross margin: The increase in cost of goods sold of $856,000 relates to our acquisition of Agri-Energy on September 22, 2010. Prior to our acquisition of Agri-Energy, we did not have any cost of goods sold. Cost of goods sold includes costs for direct labor, materials and certain plant overhead costs. Direct labor includes compensation of non-management personnel involved in the operation of our ethanol plant. Our gross margin is derived from our total revenues less our cost of goods sold.

Research and development: The increase in research and development expense of $4,702,000, or 70%, was primarily driven by expenses recorded under our licensing agreement with Cargill for an increase of $1,383,000, an increase in depreciation expense of $1,284,000, which includes depreciation of equipment at our demonstration facility, the incurrence of payroll and related expenses of $583,000, an increase in stock-based compensation of $398,000, and an increase of $435,000 relating to our use of consultants and for contracted research, including work under our contractor and development agreements with VIB, Caltech, UCLA and Cargill. Research and development expense includes stock-

based compensation expense of $120,000 and $517,000 in the nine months ended September 30, 2009 and 2010, respectively.

Selling, general and administrative: The increase in selling, general and administrative expense of $13,429,000, or 236%, was primarily driven by an increase in stock-based compensation expense of $9,369,000 and legal fees of $1,479,000, which relate primarily to our acquisition of Agri-Energy, legal expenses to support our intellectual property positions and other general legal fees. We also had increases in management fees paid to CDP of $427,000, the incurrence of payroll and related expenses, including relocation and recruiting, of $904,000, and use of consultants of $574,000. Selling, general and administrative expense included stock-based compensation expense of $138,000 and $9,507,000 in the nine months ended September 30, 2009 and 2010, respectively. Included in the $9,507,000 of stock-based compensation in selling, general and administrative expense for the nine months ended September 30, 2010 is $6,978,000 relating to the warrant issued to CDP and $774,000 relating 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.

Interest expense: Interest expense increased by $650,000, or 81%, 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 relating 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 $151,000, or 61%, is primarily due to $144,000 received in 2009 under a Colorado state incentive program related to local jobs creation.

Loss from change in fair value of warrant liabilities: The increase in loss from change in fair value of warrant liabilities of $2,902,000, or 726%, relates to the change in the fair value of our preferred stock warrants, which are recorded as derivatives and recognized in our consolidated balance sheet as a liability.

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 $1,789,000 relates to our issuance of Series D-1 convertible preferred stock between March and May 2010 which conversion ratio adjusts such that each share of Series D-1 preferred stock is convertible into two shares of common stock if an initial public offering or qualified financing does not occur by September 30, 2011.

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Comparison of years ended December 31, 2008 and 2009

	Year ended December 31, 2008	Year ended December 31, 2009	$ increase (decrease)	% Change
Revenue	$ 208,000	$ 660,000	$ 452,000	217%
Operating expenses:				
Research and development	(7,376,000)	(10,508,000)	3,132,000	42%
Selling, general and administrative	(6,065,000)	(8,699,000)	2,634,000	43%
Loss on abandonment or disposal of assets	(78,000)	(22,000)	(56,000)	(72%)
Total operating expenses	(13,519,000)	(19,229,000)	5,710,000	42%
Loss from operations	(13,311,000)	(18,569,000)	5,258,000	40%
Other (expense) income:				
Interest expense	(1,385,000)	(1,103,000)	(282,000)	(20%)
Interest and other income	154,000	277,000	123,000	80%
Loss from change in fair value of warrant liabilities	0	(490,000)	490,000	N/A
Other expense net	(1,231,000)	(1,316,000)	85,000	7%
Net loss attributable to Gevo, Inc. common stockholders	$ (14,542,000)	$ (19,885,000)	$ 5,343,000	37%

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

Research and development: The increase in research and development expense of $3,132,000, or 42%, was primarily due to additional resources deployed for development of our first-generation and second-generation 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 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 activities through Gevo Development. 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, which was established during September 2009, 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.

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

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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.

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 effective January 1, 2009, were reclassified from equity to derivative liabilities and recognized in our consolidated balance sheet as a liability.

Comparison of years ended December 31, 2007 and 2008

	Year ended December 31, 2007	Year ended December 31, 2008	$ increase (decrease)	% Change
Revenue	$ 275,000	$ 208,000	$ (67,000)	(24%)
Operating expenses:				
Research and development	(3,699,000)	(7,376,000)	3,677,000	99%
Selling, general and administrative	(2,601,000)	(6,065,000)	3,464,000	133%
Lease termination costs	(894,000)		894,000	(100%)
Loss on abandonment or disposal of assets	(243,000)	(78,000)	(165,000)	(68%)
Total operating expenses	(7,437,000)	(13,519,000)	6,082,000	82%
Loss from operations	(7,162,000)	(13,311,000)	6,149,000	86%
Other (expense) income:				
Interest expense	(140,000)	(1,385,000)	1,245,000	889%
Interest and other income	76,000	154,000	78,000	103%
Other expense net	(64,000)	(1,231,000)	1,167,000	1,823%
Net loss attributable to Gevo, Inc. common stockholders	$ (7,226,000)	$ (14,542,000)	$ 7,316,000	101%

Revenues: The decrease in revenue of $67,000, or 24%, primarily reflects completion of research services on a project funded by the US Army under which we were a sub-awardee of Caltech in 2007.

Research and development: The increase in research and development expense of $3,677,000, or 99%, was primarily related to $1,894,000 of increases in personnel costs, including costs for hiring additional research and development staff, and expenses for stock-based compensation. Research and development expense included stock-based compensation expenses of $36,000 and $106,000 during 2007 and 2008, respectively. Our overall research and development expense increases reflected increased levels of activity including increased spending on research-related

consultants of $395,000 and laboratory supplies and

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services of $312,000 in 2008. Depreciation expense on equipment used in research and development activities, including initial depreciation on our pilot plant which was commissioned in 2008, also increased by approximately $403,000.

Selling, general and administrative: The increase in selling, general and administrative expense of $3,464,000, or 133%, primarily related to $1,761,000 of increases in personnel costs, including costs for initial hiring of executives with specialized knowledge of our industry and administrative staff to support growth, and expenses for stock-based compensation. Selling, general and administrative expense included stock-based compensation expenses of $19,000 and $101,000 during 2007 and 2008, respectively. In addition, during 2008 we relocated our primary business offices and operations from Pasadena, California to Englewood, Colorado and incurred $706,000 in moving and relocation costs. We also increased our spending on rent expense and travel-related expenses by approximately $337,000 and $172,000, respectively, as we expanded our operations and business.

Lease termination costs: In December 2007 we terminated a facility lease in connection with the relocation of our offices from California to Colorado in exchange for specific termination payments and recorded a lease termination cost of $894,000.

Loss on abandonment or disposal of assets: Loss on abandonment or disposal of assets in 2007 and 2008 primarily represented abandoned assets as a result of the relocation of our offices in California to Colorado.

Interest expense: The increase in interest expense of $1,245,000, or 889%, primarily relates to $1,010,000 of debt discounts on our convertible promissory notes that were amortized to interest expense upon conversion to Series C preferred stock in March 2008, and $192,000 increase in interest expense relating to our secured debt facility.

Interest and other income: Interest and other income comprised interest earned from invested funds.

LIQUIDITY AND CAPITAL RESOURCES

From inception through September 30, 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 $3,531,000 from revenues. To date, we have not generated any revenues from the sale of isobutanol.

As of September 30, 2010, our cash and cash equivalents totaled $22,516,000, including proceeds from the issuance of our Series D-1 preferred stock. 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. 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 anticipated net proceeds from this 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 acquisitions of or joint ventures involving ethanol plant assets for retrofit to isobutanol production will be subject to our raising additional capital through this offering or future equity or debt issuances. 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 commercial products and/or technology, obtaining adequate financing to complete our development activities, obtaining adequate

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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.

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

	Year ended December 31, 2007	Year ended December 31, 2008	Year ended December 31, 2009	Nine months ended September 30, 2010
Net cash used in operating activities	(5,869,000)	(11,741,000)	(16,099,000)	(15,870,000)
Net cash used in investing activities	(1,559,000)	(2,315,000)	(2,942,000)	(24,810,000)
Net cash provided by financing activities	6,486,000	23,628,000	30,646,000	41,956,000

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 $15,870,000 during the nine months ended September 30, 2010 reflected our net loss of $33,768,000 offset by non-cash charges totaling $15,298,000 and changes in operating assets and liabilities of $2,600,000. Non-cash charges included depreciation and amortization of $2,173,000, stock-based compensation of $9,250,000, loss from change in fair value of warrant liabilities of $3,302,000 and non-cash interest expense and amortization of debt discounts of $573,000. The net source of cash from our operating assets and liabilities of $2,600,000 primarily reflected accrued milestone payments under our Cargill license agreement that are payable in 2011 and 2012 and amounts accrued for work performed by ICM.

Cash used in operating activities of $16,099,000 in 2009 reflected our net loss of $19,885,000 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 that were payable in 2010.

Cash used in operating activities of $11,741,000 in 2008 reflected our net loss of $14,542,000 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.

Cash used in operating activities of $5,869,000 in 2007 reflected our net loss of $7,226,000 offset by non-cash charges totaling $602,000 and changes in our operating assets and liabilities of $755,000. Non-cash charges included depreciation of $240,000, stock-based compensation of $55,000, loss on abandonment or disposal of fixed assets of $243,000 and non-cash interest expense and amortization of debt discounts of $54,000. The net source of cash from our operating assets and liabilities primarily reflected accrual of costs related to the relocation of our principal offices from California to Colorado.

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Investing activities

Our investing activities consist primarily of capital expenditures.

During the nine months ended September 30, 2010, cash used in investing activities included $472,000 for capital expenditures and $24,378,000 related to the purchase and acquisition of Agri-Energy (aggregate cash purchase price of $24,963,000 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.

In 2007, cash used in investing activities was primarily related to $1,341,000 of capital expenditures, including $837,000 for laboratory related equipment used in our development programs.

Financing activities

During the nine months ended September 30, 2010, cash provided by financing activities was $41,956,000, 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, repayment of $5,000,000 of principal and $250,000 of final payment under our debt with Lighthouse, payment of deferred offering costs relating to this offering of $1,351,000 and payment of debt issue costs relating to our TriplePoint debt of $962,000.

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.

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.

In 2007, cash provided by financing activities was $6,486,000, primarily due to net proceeds of $4,918,000 from our sales of Series A-4 preferred stock and Series B preferred stock. During 2007, we also borrowed $1,568,000 under our long-term debt arrangement.

Potential additional investment by existing investors

Several of our investors, including LANXESS Corporation, Total Energy Ventures International, Khosla Ventures I, LP, Khosla Ventures III, LP, Virgin Green Fund I, L.P., Burrill Life Sciences Capital Fund III, L.P., Malaysian Life Sciences Capital Fund Ltd. and Osage University Partners Seed Fund, L.P., have committed to invest an additional $34 million in a private placement of our preferred stock in the event that this offering is not completed. As of January 14, 2011, these funds have been placed into escrow and will be drawn upon if we decide to close the private placement.

Agri-Energy acquisition

In August 2010, we entered into an acquisition agreement with Agri-Energy. In September 2010, we closed the transactions contemplated by the acquisition agreement and acquired a 22 MGPY ethanol

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production facility in Luverne, Minnesota that we intend to retrofit to produce isobutanol. We paid a purchase price of approximately $20.7 million. In addition, we acquired and paid for $4.9 million in estimated 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 Luverne facility retrofit process. Based on ICM s initial evaluation of the Luverne facility, we project capital costs of approximately $17 million to retrofit this plant to produce isobutanol. We expect to incur additional costs of approximately $5 million related to the retrofit that are unique to the Luverne facility, including the costs associated with construction of a seed train and equipment and storage tanks that are designed to allow switching between isobutanol and ethanol production, 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 also 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.

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

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collateral as defined in the agreement, as amended. We cannot borrow any further amounts under our agreement with Lighthouse and 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. Gevo, Inc. used the funds from this loan to repay a portion of its existing indebtedness with Lighthouse.

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 held by Gevo Development and substantially all the assets of Agri-Energy. The loan matures on September 1, 2014, and provides for interest only payments during the first 24 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, 2009:

	Total	2010	2011	2012	2013	2014 and Thereafter
Secured long-term debt, including current portion (before debt discounts)(1)	$ 8,389,000	$	$ 5,131,000	$ 3,258,000	$	$
Cash interest payments on long-term debt(1)	1,654,000	965,000	619,000	70,000		
Operating leases(2)	1,770,000	490,000	491,000	497,000	292,000	
Management fees to CDP(3)	1,910,000	955,000	955,000			
Total	$ 13,723,000	$ 2,410,000	$ 7,196,000	$ 3,825,000	$ 292,000	$

(1) Includes principal and final payments on our long-term debt as of December 31, 2009. In August 2010, we paid off approximately $5 million of principal on our debt with Lighthouse and borrowed $5 million from TriplePoint. In September 2010, we borrowed an additional $12.5 million from TriplePoint. For more information on these subsequent events, please see Secured long-term debt above.

(footnotes continued on following page)

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(2) Our commitments for operating leases primarily relate to our leased facility in Englewood, Colorado.
(3) Includes management fees payable to CDP under the commercialization agreement through December 31, 2011. 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 connection with this transaction, the commercialization agreement was terminated and is of no further force or effect and Gevo, Inc. is no longer obligated to pay the management fees that would otherwise have become due to CDP, please see Gevo Development, LLC and CDP Gevo, LLC above.

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.

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 future 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 September 30, 2010, the milestone payment of $2,000,000 was recorded as a total liability of $1,682,000, net of a discount of $318,000, of which $682,000 was recorded in accounts payable and accrued expenses, and $1,000,000 was recorded in other liabilities on our balance sheet, which will be paid during the years ended December 31, 2011 and 2012. 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 September 30, 2010 of $104,000 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.

VIB

In May 2009, we entered into a research agreement with VIB to engage in research to modify yeast to improve the production of isobutanol. The term of the agreement, as modified, is for two years during which we must pay VIB the sum of 300,000 per year, plus travel expenses, and up to an additional 210,000 depending on the completion of four defined contract milestones. The agreement may be terminated by us with six months advance written notice. No milestones have been met or paid under this agreement as of September 30, 2010.

California Institute of Technology (Caltech)

In 2005 we entered into a fully paid up license agreement with Caltech to obtain certain patent rights and improvement rights in exchange for the issuance of 200,000 shares of our common stock valued at a

de minimis amount. The term of the agreement, as amended, shall continue until the expiration, revocation, invalidation or unenforceability of the licensed patent rights and improvements licensed to us. Improvements conceived and reduced to practice in the applicable laboratory at Caltech prior to July 12, 2013 are included in the improvement rights.

During 2009 we entered into a contractor agreement with Caltech under which Caltech will provide us with research and development services. The agreement is effective from October 1, 2009 through September 30, 2011 and may require future payments of up to $450,000. Either party may terminate the agreement upon 15 days written notice.

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.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest rate risk

We had unrestricted cash and cash equivalents totaling $9,635,000, $21,240,000 and $22,516,000 at December 31, 2008 and 2009 and September 30, 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 the nine months ended September 30, 2010, our interest income would have declined by approximately $13,000 and $10,000, 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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Foreign currency risk

All of our employees are located, and all of our major operations are currently performed, in the US. We occasionally pay for contractor or research services in a currency other than the US dollar. Today, we have minimal exposure to fluctuations in foreign currency exchange rates as the difference from the time period for any services performed which require payment in a foreign currency and the date of payment is short.

RECENT ACCOUNTING PRONOUNCEMENTS

In June 2009, the FASB amended its guidance to FASB ASC 810, Consolidation, (previously FASB Statement No. 167, Amendments to FASB Interpretation No. 46(R)) surrounding a company s analysis to determine whether any of its variable interest entities constitute controlling financial interests in a variable interest entity. This analysis identifies the primary beneficiary of a variable interest entity as an enterprise that has both of the following characteristics: (a) the power to direct the activities of a variable interest entity that most significantly impact the entity s economic performance and (b) the obligation to absorb losses of the entity that could potentially be significant to the variable interest entity. Additionally, an enterprise is required to assess whether it has an implicit financial responsibility to ensure that a variable interest entity operates as designed when determining whether it has the power to direct the activities of the variable interest entity that most significantly impact the entity s economic performance. The new guidance also requires ongoing reassessments of whether an enterprise is the primary beneficiary of a variable interest entity. The guidance is effective for the first annual reporting period that begins after November 15, 2009. The adoption did not have a material impact on our consolidated financial statements.

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 our consolidated financial statements.

In February 2010, the FASB issued ASU No. 2010-09, Subsequent Events Amendments to Certain Recognition and Disclosure Requirements, that amends guidance on subsequent events. This amendment removes the requirement for SEC filers to disclose the date through which an entity has evaluated subsequent events. However, the date-disclosure exemption does not relieve management of an SEC filer from its responsibility to evaluate subsequent events through the date on which financial statements are issued. All of the amendments in this ASU are effective upon issuance of the final ASU, except for the use of the issued date for conduit debt obligors. That amendment is effective for interim or annual periods ending after June 15, 2010. The adoption of this standard did not have a material impact on our consolidated financial statements.

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Background and perspective

Historically, our management team has had a goal to develop a technology for the production of a building block for biobased fuels and chemicals with the following characteristics:

- the process would have very high conversion yields so as to maximize carbon capture from fermentation plants while minimizing costs;
- the product would be produced in existing fermentation plants to minimize capital costs while utilizing well-known, low-risk production processes;
- the process would utilize a wide variety of economical and sustainable feedstocks; and
- the process would produce at least one platform product that could be sold directly into existing petrochemical value chains for both fuels and chemicals, diversifying market risk and minimizing required change in existing business systems.

We envisioned a technology that could connect the ethanol industry s highly developed infrastructure for the production of fermentation products using renewable feedstocks and the petrochemical industry s well-developed infrastructure of existing refineries and pipelines in order to deliver products that have significant value, yet are economical enough to replace their petrochemical equivalents. The optimal platform product would be produced via fermentation and then converted into hydrocarbons utilizing well-known, widely utilized technologies. Taking these considerations into account, we determined that isobutanol would be the optimal platform product if we had the technology to produce it.

Isobutanol is an attractive product because it can be converted into plastics, fibers, rubber, other polymers and hydrocarbon fuels using well-known processing techniques, many of which are commonly used in the petrochemical and refining industries today. Isobutanol, when produced from renewable sources, enables the production of a series of basic petrochemical products which are chemically identical to the petroleum-based products currently used by petrochemical companies and refineries, except that they contain carbon derived from renewable sources. We developed GIFT in order to economically produce isobutanol. We believe that our technology, and the renewable isobutanol that can be produced from it, approach the goal envisioned by our management team.

Our technology platform is high yielding, approaching 94% of the theoretically possible conversion of plant sugars to isobutanol. Carbon dioxide is the renewable carbon source, which is converted to sugars by plants, and those plant sugars can be converted to isobutanol using GIFT . Our biocatalysts were designed to operate in existing ethanol plants, yet produce isobutanol. Our low cost GIFT retrofit package uses well-known processing equipment and is expected to cost approximately $40 million for a standard ICM-designed 100 MGPY ethanol plant. We believe our approach will be capital efficient for several reasons: (i) based on the study conducted by ICM, we expect a relatively short 14-month build-out cycle, (ii) we believe the ethanol plant undergoing retrofit can continue to produce marketable ethanol during most of the retrofit period, and (iii) we will know that the plant subject to retrofit is operational and only the retrofit will be new.

GIFT enables us to utilize fermentable sugars from grains, sugar cane and cellulosic biomass to produce isobutanol. We believe that the most economical approach in the near term is to use feedstocks that already have existing infrastructure, commodity markets and a strong agricultural base, like corn and sugar cane. In the US, we plan to use corn starch as the fermentation feedstock. As our biocatalysts have already been shown to be capable of utilizing sugars from cellulosic feedstocks, we expect to be in a position to utilize cellulosic feedstocks once the technology to convert such feedstocks into fermentable sugars becomes commercially available.

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Background and perspective

Isobutanol, without modification, has direct applications in portions of the chemicals and fuel blendstock markets. However, its greatest value lies in the fact that it can be used as a building block to produce plastics, fibers, rubber, other polymers and hydrocarbon fuels. We believe that the hydrocarbon products that can be produced from isobutanol have potential applications in approximately 40% of the global petrochemicals market, based upon volume data from SRI, CMAI and Nexant, and substantially all of the global hydrocarbon fuels market, based upon volume data from the IEA.

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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 its 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 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, as 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 minimal revenue and has 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

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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. The global market for chemical-grade butanol is approximately 1.1 BGPY, based upon volume data from SRI.

- 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, or 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. The potential global market for fuel-grade isobutanol as a fuel oxygenate is approximately 40 BGPY, based on IEA volume data.

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. These products represent a potential market for isobutanol of approximately 7.6 BGPY.

- 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. These products represent a potential market for isobutanol of approximately 739 MGPY.

Ø 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

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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. These products represent a potential market for isobutanol of approximately 31.7 BGPY.

- 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. These products represent a potential market for isobutanol of approximately 15 BGPY.

- 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. These products represent a potential market for isobutanol of approximately 12 BGPY.

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 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. This represents a potential market for isobutanol of approximately 349 BGPY.

- We have demonstrated the conversion of our isobutanol into a renewable jet fuel blendstock which meets current ASTM and US military synthetic jet fuel blendstock performance and purity requirements, and we are working to obtain ASTM approval 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. This represents a potential market for isobutanol of approximately 94 BGPY.

- Diesel fuel may also be produced from our isobutanol. This represents a potential market for isobutanol of approximately 484 BGPY.

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

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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, 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 MGPY ethanol demonstration facility in St. Joseph, Missouri using our first-generation biocatalyst. We plan to secure access to existing ethanol production facilities through direct acquisitions and joint ventures. 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 Luverne facility retrofit process. The Luverne 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 Luverne 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 the retrofit that are unique to the Luverne facility, including costs associated with the construction of a seed train and equipment and storage tanks that are designed to allow switching between isobutanol and ethanol production, bringing the total projected cost to approximately $22 million. We expect to begin commercial production of isobutanol at the Luverne facility in the first half of 2012. We then plan to expand our production capacity beyond this facility to produce and sell over 350 million gallons of isobutanol in 2015.

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 selling their facilities to us or entering into joint ventures with us to retrofit their plants 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.

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The following graphic illustrates our low capital cost retrofit strategy to produce isobutanol for direct use, for use in the production of plastics, materials, rubber and other polymers and for use in the production of hydrocarbon fuels:

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. Certain of our initial sales are expected to be to refiner customers that will further process our isobutanol into hydrocarbon products such as isooctane and butenes. In addition, we intend to sell isobutanol to high-value specialty chemicals markets focused on solvents and chemical-grade isobutanol.

In September 2010, we acquired a 22 MGPY ethanol production facility in Luverne, Minnesota which we intend to retrofit for isobutanol production. During the retrofit process, 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.

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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., or LANXESS, an affiliate of LANXESS Corporation, an investor 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.

- **TOTAL PETROCHEMICALS**. In February 2010, we entered into a non-binding letter of intent with TOTAL PETROCHEMICALS USA, Inc., or TOTAL PETROCHEMICALS, an affiliate of TOTAL S.A., a major oil and gas integrated company and indirect investor in our 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 investors, Total Energy Ventures International.

- **Toray Industries**. In April 2010, we received a non-binding letter of interest from Toray Industries, Inc., or 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., or 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 memorandum 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.

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- **Sasol Chemical Industries**. In November 2010, we entered into a non-binding letter of intent with Sasol Chemical Industries Ltd., 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 quarter 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, or 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 certifications have been 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 also intend to develop relationships with companies that are engineering and piloting the processes necessary to convert isobutanol to biobased jet fuel.

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., or 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 to 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 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 based on our review of refinery pricing models, which attribute a higher value to products with lower RVP and higher energy content in

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fuels markets. 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 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 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

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for the production of advanced biofuels, including cellulosic ethanol. Based on ICM s initial evaluation of the Luverne facility, we project capital costs of approximately $17 million to retrofit this plant to produce 18 MGPY of isobutanol. 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. 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 a 22 MGPY 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 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 direct or indirect investors in 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 and 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.

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 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-generation biocatalyst, we have already demonstrated that we

can produce isobutanol at key commercial parameters, validating our biotechnology pathways and efficiencies. To establish isobutanol production in a commercial industrial setting, we are now nearing completion of the development of our second-generation biocatalyst, 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 future-generation 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 UCLA and exclusively licensed from 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. By applying our proprietary technology to the licensed technology we were able to engineer the isobutanol pathways into the biocatalyst, convert the isobutanol pathway to allow for anaerobic, or oxygen free, isobutanol production and then minimize 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 the typical by-products, our proprietary isobutanol pathway channels the available energy content of fermentable sugars to isobutanol. Due to thermodynamic constraints that govern the conservation of energy, other processes may match our yield, but will be unable to exceed it significantly. We have achieved approximately 94% of the theoretical yield, which is near to, if not the maximum practical yield limit attainable from the fermentation of sugars, with yield losses being accounted for 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

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

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. Yeast is the preferred host for low cost industrial fermentation because it is industrially proven for biofuels production, capable of out-competing most 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.

Comparison of fermentation performance

The chart below compares the target performance levels of our biocatalysts to the performance levels achieved in ethanol fermentation. We have already achieved these levels of performance with our first- generation biocatalyst, and our second-generation biocatalyst s performance is approaching our commercial targets, as discussed above. Because we are developing our isobutanol fermentation performance to be similar to that of current ethanol fermentation, we expect to be able to use existing ethanol production infrastructure to ferment isobutanol without needing to change the milling and cooking processes, expand the fermentor tank sizes or increase natural gas consumption.

Comparison of Fermentation

Performance	Ethanol	Gevo Isobutanol(1)
Microorganism	Yeast	Yeast
Fermentation time (hours)	48-72(2)	48-72(2)

(1) Commercial targets accomplished with first- and second-generation biocatalysts.
(2) Commercial range for existing ethanol plants according to information supplied by ethanol producers and ICM. The Luverne facility utilizes a 65 hour fermentation time.

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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 with our first-generation biocatalyst that our pathway is capable of converting the types of sugars in grains and sugar cane to isobutanol at our commercial targets for concentration, yield and productivity. Similarly, 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 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 integrated fermentation and recovery system provides enhanced fermentation performance as well as low cost, energy-efficient recovery of isobutanol and other alcohols. 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.

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As shown in the following diagram, 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.

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How GIFT SEPARATION WORKS

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. Additionally, isobutanol and water are only sparingly miscible (they do not readily form a solution when mixed). GIFT utilizes this immiscibility to separate isobutanol and water into two phases, a water-rich phase and an isobutanol-rich phase. This separation allows concentrated isobutanol to be moved forward to final product dewatering in the dewatering column of the distillation system, and water-rich isobutanol to be redistilled utilizing the existing distillation equipment and a very low energy input. The GIFT process not only efficiently separates isobutanol, but also promotes optimal fermentation by preventing excessive isobutanol concentration in the fermentor, which can hinder biocatalyst performance.

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.

We have demonstrated the feasibility of converting isobutanol into many downstream products and expect to work with other companies to further develop this production technology and to commercialize these products. We have formed strong relationships with LANXESS, TOTAL PETROCHEMICALS, Toray Industries, United Airlines and CDTECH and we are in discussions with multiple other companies. Some of these companies are working with us to define commercial technology for dehydration of isobutanol and other required downstream conversion technologies. In some cases, we have provided these companies with technical information and product samples to enable complete development of production technology packages to convert isobutanol into fuel components and hydrocarbon chemicals. We intend to utilize these collaborations to develop and broaden the downstream markets for products derived from our isobutanol.

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MILESTONES ACHIEVED AND COMMERCIALIZATION ROADMAP

GIFT developed in mini-plant and pilot plant

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

Design and operation of demonstration facility

In 2008, we began our ramp-up to commercial scale production when we formed an exclusive alliance with ICM to jointly develop a proprietary design for retrofitting an ethanol plant for the production of isobutanol using GIFT . The proprietary retrofit design was then implemented at ICM s 1 MGPY ethanol demonstration facility in St. Joseph, Missouri. The initial retrofit design, procurement and construction were completed in August 2009. By the end of September 2009, we had operated the demonstration plant facility and successfully produced isobutanol at commercial fermentation performance levels using our first-generation biocatalyst. We incurred total capital expenditures for the retrofit of the demonstration facility of $2.6 million during 2009.

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 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 the GIFT process and biocatalyst. 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 and 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 to a modern ICM design, thus improving 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.

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Based on ICM s initial evaluation of the Luverne facility, we project capital costs of approximately $17 million to retrofit this plant to produce isobutanol. We expect to incur additional costs of approximately $5 million related to the retrofit that are unique to the Luverne facility, including costs associated with the construction of a seed train and equipment and storage tanks that are designed to allow switching between isobutanol and ethanol production, 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 Luverne facility retrofit process and expect to commence commercial production of approximately 18 MGPY of isobutanol at the Luverne 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 acquisitions and joint ventures. 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. We are 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

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sugar molecules becomes commercially available. 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.

INDUSTRY OVERVIEW

Petroleum is a fundamental source of chemicals and fuels, with annual global demand in 2008 estimated at $3.0 trillion based on data from the IEA and 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 on heavy 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.

- **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

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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.

- **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.

- **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 2007 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. 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, or 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, or GHG, reduction compared to 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 RIN value of 1.3. Therefore, a refiner could purchase fewer gallons of isobutanol than ethanol while meeting its biofuels obligation under RFS2.

- **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, or 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.

- **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.

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- **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 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 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, a joint venture between BP and 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., TetraVitae Bioscience, Inc., Cobalt Technologies, Inc. and Green Biologics Ltd. We understand that these companies produce n-butanol from an acetone-butanol-ethanol, or 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

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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. With this combination of properties our isobutanol is targeted to compete effectively in the portions of the gasoline market where ethanol blending is not allowed, as well as in regions with particularly low RVP limits.

Many production and technology supply companies are working to develop ethanol production from cellulosic feedstocks, including 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.

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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 hydrogenated fatty acid methyl esters.

In the diesel fuels market, competitors such as 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

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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 may 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 a registered trademark for Gevo Integrated Fermentation Technology® in the US, and have pending US trademark applications for Gevo and GIFT. 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 Advanced Biofuels LLC, a joint venture between DuPont and BP for the development and marketing of isobutanol, alleging that we have infringed upon its patent relating to the production of isobutanol, may become significant (as described further in Business Legal Proceedings). 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 which 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 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

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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. We have agreed to reimburse ICM for engineering fees, equipment, plant modification costs and project fees incurred under the development agreement. We can terminate the development agreement at any time with 30 days written notice and either party may terminate the development agreement immediately upon the other party s material breach of any provisions of the agreement relating to confidentiality or intellectual property. 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. This technology should allow us to speed our development of biomass processing microorganisms, enabling more rapid scaling of our technologies to commercial production. This technology continues to develop, and we expect continued improvements in our production scale and efficiency.

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.

As consideration for the license agreement, we paid an upfront license issue fee and issued shares of our common stock to The Regents. 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. We also have the right to issue sublicenses to third parties, subject to the payment of sublicensing fees and royalty fees to The Regents.

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The license agreement sets forth lists of due diligence deadlines for the development, manufacture and commercialization of certain molecules. Should we fail to meet the diligence deadlines set forth in the license agreement for any specific chemical in the field of use, The Regents will have the right to either reduce such license to a nonexclusive license or terminate such license. We have limited rights to extend the due diligence deadlines and we can terminate the license agreement at any time with 90 days written notice. The Regents also have the right to terminate the license agreement if we are prevented from performing our obligations under the agreement, due to a force majeure event, for a period of one year. Unless terminated earlier, the license agreement will remain 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.

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 to use certain of Cargill s 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 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.

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OTHER MATERIAL AGREEMENTS

Gevo Development, LLC

In September 2009, Gevo, Inc. formed 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 direct acquisitions and joint ventures. 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, or 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.

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. This equity purchase agreement, which was entered into in August 2010, provided that the purchase of the class B interests would close on the earlier of September 22, 2010, or the date Gevo, Inc. completed this offering. 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. 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 August 2010, we entered into an acquisition agreement pursuant to which we agreed to purchase 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, from

their common owner, CORN-er Stone Farmers Cooperative, a Minnesota cooperative association. In September 2010, we consummated the transactions contemplated by this acquisition agreement, and 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 approximately $20.7 million. In addition, we acquired and paid for $4.9 million in estimated working capital. The acquisition agreement contains customary representations, warranties, covenants and indemnification provisions and provided for an aggregate of approximately $3.5 million to be placed into escrow as security for deficiencies in working capital and seller indemnification obligations.

We have begun the project engineering and permitting portion of the Luverne facility retrofit process. The Luverne facility is a traditional dry-mill facility, which means that it uses dry-milled corn as a feedstock. Based on ICM s initial evaluation of the Luverne facility, we project capital costs of approximately $17 million to retrofit this plant to produce isobutanol. We expect to incur additional costs of approximately $5 million related to the retrofit that are unique to the Luverne facility, including costs associated with the construction of a seed train and equipment and storage tanks designed to allow switching between isobutanol and ethanol production, bringing the total projected cost of the retrofit to approximately $22 million. We expect to begin commercial production of isobutanol at the Luverne facility in the first half of 2012.

TriplePoint financing

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 $5.0 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 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. Gevo, Inc. used the funds from this loan to repay $5.0 million in outstanding principal under its loan facility with Lighthouse. This loan is also secured by substantially all of the assets of Agri-Energy, LLC.

Warrant Agreement 1. In August 2010, in connection with entering into the initial loan and security agreement with TriplePoint, Gevo, Inc. issued TriplePoint a warrant to purchase 32,126 shares of its Series D-1 preferred stock (or the shares of its preferred stock issued in its next round of equity financing, if such shares are sold at a price per share less than $17.12). The exercise price of the warrant is $17.12 per share (or the price per share of the next round of preferred stock, if applicable). The warrants are subject to antidilution adjustments upon the occurrence of certain events. The warrants provide TriplePoint with registration rights, and are exercisable until the later of (i) August 5, 2017 or (ii) five years from the effective date of this offering.

Loan and Security Agreement 2. In August 2010, concurrently with the execution of the acquisition agreement, 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.

Warrant Agreement 2. In August 2010, in connection with entering into the second loan and security agreement, Gevo, Inc. issued TriplePoint a warrant to purchase up to 73,014 shares of its Series D-1 preferred stock (or the shares of its preferred stock issued in its next round of equity financing, if such shares are sold at a price per share less than $17.12). The exercise price of the warrant is $17.12 per share (or the price per share of the next round of preferred stock, if applicable). The warrant is divided into two tranches. Tranche A, which represents a warrant to purchase 18,254 shares of Series D-1 preferred stock, vested upon the issuance of the warrant in August 2010. Tranche B, which represents a warrant to purchase 54,760 shares of Series D-1 preferred stock, vested upon the initial advance under the $12.5 million loan and security agreement in September 2010. The warrants are subject to antidilution adjustments upon the occurrence of certain events. The warrants provide TriplePoint with registration rights, and are exercisable until the later of (i) August 5, 2017 or (ii) five years from the effective date of this offering.

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 2007, 2008 and 2009, we spent $3,699,000, $7,376,000 and $10,508,000, respectively, on research and development activities. The following table shows our research and development costs by function during the three years ended December 31, 2007, 2008 and 2009:

	2007	2008	2009
Biocatalyst development	$ 3,000,000	$ 5,166,000	$ 7,007,000
Process engineering and operation of pilot and demo plants	347,000	1,215,000	2,722,000
Chemistry and applications development	352,000	995,000	779,000
	$ 3,699,000	$ 7,376,000	$ 10,508,000

During 2007, 2008 and 2009, we recorded revenue from government grants and cooperative agreements in the amounts of $275,000, $208,000 and $660,000, respectively, which primarily related to research and development activities performed in our biocatalyst group.

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

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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 require 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 TSCA. These laws and regulations require us to obtain and comply with the EPA s Microbial Commercial Activity Notice process to operate our isobutanol assets. We do not anticipate a material adverse effect on our business or financial condition as a result of our efforts to comply with these requirements. However, the TSCA new chemical submission policies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of our products. We cannot predict the likelihood, nature or extent of adverse governmental regulations that might arise from future legislative or administrative action, either in the US or abroad.

There are various third-party certification organizations, such as ASTM and Underwriters Laboratories, 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 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.

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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, or NESHAP, that 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.

FACILITIES

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 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.

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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.

LEGAL PROCEEDINGS

On January 14, 2011, Butamax Advanced Biofuels LLC, or Butamax, a joint venture between DuPont and BP for the development and marketing of isobutanol, 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 U.S. Patent No. 7,851,188, entitled Fermentive production of four carbon alcohols. This patent, which is currently owned by 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 U.S. Patent No. 7,851,188. We intend to contest Butamax s allegations of infringement and defend this matter vigorously.

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EXECUTIVE OFFICERS, KEY EMPLOYEES AND DIRECTORS

The following table sets forth certain information about our executive officers and directors, as of December 31, 2010.

Name	Age	Position(s)
Patrick R. Gruber, Ph.D.	50	Chief Executive Officer and Director
Christopher Ryan, Ph.D.	49	Executive Vice President, Business Development
David Glassner, Ph.D.	53	Executive Vice President, Technology
Mark Smith	49	Chief Financial Officer
Jack Huttner	56	Executive Vice President, Corporate Development and Public Affairs
Brett Lund, J.D., M.B.A.	35	Executive Vice President, General Counsel and Secretary
David Black, M.B.A.	48	Executive Vice President, Upstream Business Development
Michael Slaney, J.D.	47	Executive Vice President, Upstream Business Development
Shai Weiss(1)(2)	42	Chairman of the Board of Directors
Ganesh M. Kishore, Ph.D.(1)	57	Director
Véronique Hervouet	49	Director
Stacy J. Smith(3)	48	Director
Ron Commander, Ph.D.(1)	60	Director
Bruce A. Smith(2)(3)	67	Director
Carlos A. Cabrera(2)(3)	59	Director

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

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

Christopher Ryan, Ph.D. has served as Executive Vice President, Business Development, of the company since June 2009. Prior to joining the company, he co-founded NatureWorks LLC in 1997. Dr. Ryan served as Chief Operating Officer for NatureWorks from 2008 to 2009 and Chief Technology Officer

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for NatureWorks from 2005 to 2008, where he was involved in the development and commercialization of the company s new biobased polymer from lab-scale production in 1992 through the completion of a $300 million world-scale production facility. Prior to 1992, Dr. Ryan served for four years in Corporate R&D for specialty chemical company HB Fuller Company. He has over 20 years of experience in strategic leadership, business development and research and product development in biobased materials. Dr. Ryan holds a Ph.D. in organic chemistry from the University of Minnesota, a B.S. in chemistry from Gustavus Adolphus College and completed the Management of Technology program at the University of Minnesota.

David Glassner, Ph.D. has served as Executive Vice President, Technology, of the company since October 2009, where he leads the company s isobutanol technology and engineering development. From March 2009 to September 2009, he was Vice President, Technology, and from July 2007 through February 2009 he was Vice President, Bioprocessing and Engineering, of the company. Prior to joining the company, he led the development of novel yeast biocatalysts for the production of lactic acid and ethanol, and the development of lactic acid, lactide and polylactide technology at NatureWorks LLC from 2000 to 2007. Prior to NatureWorks, from 1993 to 1999 he was Biofuels Technology Manager at the National Renewable Energy Laboratory where he led the development of cellulosic processing technology and the construction of the biomass to ethanol process development unit. Previously, Dr. Glassner was Director of Bioprocess Development at MBI International, where he led the development of a lactic acid pilot plant and developed patented processes for producing lactic acid, succinic acid, acetone, ethanol and butanol. Dr. Glassner holds Ph.D., M.S. and B.S. degrees in chemical engineering from Michigan State University.

Mark Smith has served as Chief Financial Officer of the company since November 2008. Prior to joining the company, Mr. Smith served as Chief Financial Officer of Replidyne, Inc., from March 2006 to February 2009 where he played a leadership role in completing its initial public offering and executing its strategic sale to Cardiovascular Systems, Inc. Prior to joining Replidyne, Mr. Smith was an officer at Nabi Biopharmaceuticals, from August 1999 to March 2006, serving as Senior Vice President, Finance, and Chief Financial Officer from April 2001 to March 2006. Prior to joining Nabi Biopharmaceuticals, Mr. Smith was an officer at Neuromedical Systems, Inc., where he served as Vice President, Finance and Administration and Chief Financial Officer from March 1998 to July 1999. He previously served in various financial executive capacities at Genzyme Corporation from 1996 to 1998, most recently as Group Controller. From 1991 to 1996 Mr. Smith worked in various financial management capacities at Genetrix, Inc., most recently as Chief Financial Officer prior to its sale to Genzyme in 1996. He previously was an accountant at Price Waterhouse (now PricewaterhouseCoopers) in both Australia and the US. Mr. Smith holds a B.A. in accounting from Canberra College of Advanced Education.

Jack Huttner has served as Executive Vice President, Corporate Development and Public Affairs, of the company since August 2009. He came to the company from DuPont Danisco Cellulosic Ethanol LLC (DDCE), where he served as Vice President, Commercial and Public Affairs from September 2008 to August 2009. Previously, Mr. Huttner served as Vice President, Biorefinery Business Development, at Genencor, the industrial biotechnology division of Danisco A/S, from June 2005 to July 2008. At Genencor, he led a multifunctional team whose strategy resulted in a $140 million joint venture with DuPont (DDCE). Previously, Mr. Huttner was employed at Genencor International, Inc., as Vice President of Corporate Communications and Public Affairs from February 1998 to June 2005, where he had global responsibility for communications and external affairs, and helped shape the company s leadership position in industrial biotechnology for its successful initial public offering. Mr. Huttner was instrumental in the formation of the industrial section of BIO, the Biotechnology Industry Organization, and served as Chairman of the section s governing board for six years, from 1998 to 2004, where he

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continues to serve. From 2005 to 2007, he served on the Executive Committee of EuropaBio, the European Association for Bioindustries, where he was Chairman of the Industrial Biotechnology Council. From 2001 to 2002, Mr. Huttner served as co-chairman of the Biomass Research and Development Technical Advisory Committee, formed by Congress to oversee the federal government s $300 million bioenergy research and development budget. He continued on the Advisory Committee until his second term expired in 2007. Mr. Huttner is also on the board and executive committee of the Advanced Biofuels Association (ABFA), and he has worked extensively with the Organization for Economic Cooperation and Development (OECD), non-government organizations, farm interests and other parties to develop common positions in support of industrial sustainability and the biobased economy. Mr. Huttner holds a B.A. in philosophy from the University of Buffalo (SUNY).

Brett Lund, J.D., M.B.A. has served as Executive Vice President, General Counsel and Secretary of the company since 2007. Before joining the company, from 2004 to 2007 he served as Chairman of the legal, intellectual property and licensing group and biotechnology licensing manager for Syngenta Biotechnology, Inc. s biofuels business. At Syngenta, Mr. Lund led the management of intellectual property, in-licensing, out-licensing, research collaborations and strategic alliances. Prior to Syngenta, he served as Associate General Counsel for Ford Motor Company, Inc. s Wingcast subsidiary. Mr. Lund was previously a corporate attorney at the law firm of Cooley Godward Kronish LLP, where he represented numerous companies regarding intellectual property licensing, initial public offerings, venture capital financing, mergers and acquisitions, securities, strategic alliances and related transactions. Mr. Lund holds a J.D. from Duke Law School, an M.B.A. from Duke University s Fuqua School of Business and a B.A. in political science from the University of California, San Diego. He is a Certified Licensing Professional by the Licensing Executives Society and admitted to practice law in California and North Carolina.

David Black has served as one of the company s Executive Vice Presidents, Upstream Business Development since September 2010 and served as a Co-Managing Director of Gevo Development since September 2009. From 2007 to 2009, Mr. Black was a Co-Managing Partner of ClearDevelopment Partners, LLC, a clean energy development firm he co-founded. In 2005, he co-founded the biofuels company ASAlliances Biofuels, LLC, or ASAB, with Mr. Slaney for the purpose of developing and operating ethanol plants. He served as ASAB s Chief Executive Officer from 2005 to 2006. Prior to co-founding ASAB, Mr. Black was a partner at Deloitte & Touche, where he served as the co-head of Deloitte s national corporate finance management consulting practice. Mr. Black holds an M.B.A. from Southern Methodist University and a B.S. in finance from Arizona State University.

Michael Slaney, J.D. has served as one of the company s Executive Vice Presidents, Upstream Business Development since September 2010 and served as a Co-Managing Director of Gevo Development since September 2009. From 2007 to 2009, Mr. Slaney was a Co-Managing Partner of ClearDevelopment Partners, LLC, a clean energy development firm he co-founded. In 2005, he co-founded the biofuels company ASAB with Mr. Black for the purpose of developing and operating ethanol plants. He served as ASAB s Chief Operating Officer from 2005 to 2006. Prior to co-founding ASAB, Mr. Slaney was a partner in the M&A and corporate finance departments of Akin Gump Strauss Hauer & Feld LLP. Mr. Slaney holds a J.D. from Indiana University and a B.S. in accounting and business administration from the University of Kansas.

Shai Weiss has served as a director of the company since 2007 and was appointed chairman of the board of directors in September 2010. Mr. Weiss led the formation of Virgin Green Fund I, L.P., where he has been a partner since 2007. Prior to forming Virgin Green Fund, he held several management positions at ntl:Telewest (now Virgin Media, Inc.), including Managing Director of Consumer Products from 2004 to 2006, Integration Director for the merger between ntl, Inc. and Telewest Global, Inc. from 2005 to 2006,

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Director of Operations for the ntl Group from 2003 to 2004 and Director of Financial Planning for the Consumer division from 2002 to 2003. In his work as Managing Director of Consumer Products, Mr. Weiss was responsible for the development of internet, telephone and television for the consumer division and the Virgin.net broadband internet service provider. As director of operations for the ntl Group, he was responsible for major operational and business development projects, joint ventures and development of relationships with strategic partners. Prior to joining ntl:Telewest, Mr. Weiss organized the European office of the early-stage technology venture fund Jerusalem Venture Partners, L.P. in 2000, and was an associate with Morgan Stanley s hi-tech mergers and acquisitions and corporate finance teams from 1997 to 2000. Mr. Weiss holds an M.B.A. from Columbia University and a B.B.A. from City University of New York, Baruch College in business and finance. We believe Mr. Weiss s qualifications to sit on our board include his extensive experience as a business leader and venture capitalist and his experience in advising growth-focused companies with respect to strategic direction and business transactions.

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

Véronique Hervouet has served as a director of the company since 2009. She is also Senior Vice President, Investments, of TOTAL S.A., where she manages TOTAL S.A. s corporate venture activity. Previously, from January through August 2008, Ms. Hervouet was Senior Bioenergy Advisor at TOTAL S.A., where she provided strategy guidance on bioenergy and shaped the proposal which led to the formation of Total s corporate venturing arm. From 2005 through 2007, she was leading strategic analysis and research activities on advanced bioenergy and synthetic fuels for Total Refining and

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Marketing. From 2002 through 2005, as Research and Development Coordinator at Total Refining and Marketing, she coordinated a portfolio of research and development projects on biofuels and advanced refining technologies. From 1998 to 2001, Ms. Hervouet managed the aromatics businesses of Elf Atochem, then Atofina (after the merger of Elf, Total and Petrofina), covering spot trading, long-term contracts and logistics operation. Ms. Hervouet currently serves as Chair of the Steering Committee of the European Biofuels Technology Platform and as a member of the Steering Committee of the Bioenergy Program of the French National Research Agency; she served as Vice Chair of the Evaluation Committee of this program in 2008 and 2009. Ms. Hervouet holds an M.S. in materials science and engineering from Cornell University, and a Diplome d Ingénieur ECL in Engineering from Ecole Centrale de Lyon. We believe Ms. Hervouet s qualifications to sit on our board include her significant experience in the petroleum and chemicals markets, as well as her years of corporate leadership experience in multinational firms.

Stacy J. Smith has served as a director of the company since June 2010. He is also Senior Vice President, Finance, at Intel Corp., a position he has held since 2010, as well as Chief Financial Officer, a position he has held since 2007. Previously, he was Intel s Assistant Chief Financial Officer from 2006 to 2007, and Vice President, Finance and Enterprise Services and Chief Information Officer from 2004 to 2006, where he was responsible for Intel s Information Technology Group. From 2002 to 2004, Mr. Smith was Intel s Vice President, Sales and Marketing Group, and General Manager of Intel Europe, Middle East and Africa, where he was responsible for product sales and marketing across that region. Before then, he served in various finance positions at Intel, where he has been employed since 1988, working in the US, Asia, Europe and Latin America. Mr. Smith holds an M.B.A. in finance from the University of Texas and a B.A. in finance from the University of Texas. Mr. Smith brings global business leadership experience to the board from his current position as Senior Vice President, Finance, and Chief Financial Officer of Intel Corporation. This experience, coupled with Mr. Smith s experience serving for over 19 years in various finance and senior management positions for Intel, supports the board s efforts in overseeing and advising on strategy and financial matters, including financial reporting.

Ron Commander, Ph.D. has served as a director of the company since May 2010. He is employed by Lanxess Butyl Pte. Ltd. as the head of the LANXESS Group s Butyl Rubber Business, a position he has held since June 2004, where he has responsibility for the general management of the LANXESS Group s butyl rubber operations. From 1990 to 2004, he worked for Bayer AG, where he had responsibilities involving research and development, production and technical services for Bayer s Rubber Business Group, as well as in business development at Bayer Polymers Shanghai. Dr. Commander holds a Ph.D. in chemical engineering from Heriot-Watt University and a B.Sc. in chemical engineering from Heriot-Watt University. We believe Dr. Commander s qualifications to sit on our board include his significant background in the butyl rubber industry and his years of chemical engineering and international business experience.

Bruce A. Smith has served as a director of the company since June 2010. Since July 2010, he has also served as a member of the supervisory board of LyondellBasell Industries N.V., a publicly traded independent chemical company. Mr. Smith served as Chairman of Tesoro Corp. from 1996 until June 2010, and from 1995 until May 2010 he served as Tesoro s President and Chief Executive Officer. Between 1992 and 1995, Mr. Smith held positions as Tesoro s Chief Operating Officer, Executive Vice President, Exploration and Production, and Chief Financial Officer. Under Mr. Smith s leadership, Tesoro went from a small integrated oil company to a Fortune 100 refining and marketing company with a global supply chain and 650,000 barrels per day of production in the western US. From March 2002 to February 2008, Mr. Smith also served as a director of Noble Energy Corp., a publicly traded oil exploration and production company, where he served on the Audit, Compensation and Corporate Governance and Nominating Committees, including service as chair of the Audit Committee in 2005 and 2006 and chair of the Compensation Committee in 2003 and 2004. Mr. Smith holds an M.B.A. in

finance from the University of Kansas and a B.A. in biology from Westminster College. We believe Mr. Smith s qualifications to sit on our board include his extensive senior leadership experience in the refining and marketing industry, his substantial management background and his previous experience serving as a director and chairman of the audit and compensation committees of a publicly traded company.

Carlos A. Cabrera has served as a director of the company since June 2010. Since May 2010, he has served as a director of Ivanhoe Energy, a publicly traded international heavy-oil development and production company. Since December 2009, he has served as President and Chief Executive Officer of the National Institute of Low Carbon and Clean Energy, or NICE, a wholly owned subsidiary of the Shenhua Group, a major Chinese coal company. At NICE, Mr. Cabrera leads efforts to invent, acquire and develop technologies to reduce the environmental and climate impact of producing energy from coal. From January 2009 to July 2009, he served as Chairman of UOP LLC, a subsidiary of Honeywell International, Inc. From November 2005 to January 2009, Mr. Cabrera served as UOP s President and Chief Executive Officer, where he oversaw all of UOP s operations and helped grow the company s revenue from $850 million when he assumed the role of CEO to $2 billion in 2008. From January to October 2005, Mr. Cabrera served as UOP s Senior Vice President, Process Technology and Equipment, where he led UOP s development in the refining and petrochemicals sectors. Mr. Cabrera s previous roles at UOP include Senior Vice President, Process Technology and Equipment, Senior Vice President, Refining and Petrochemicals, Vice President, Corporate Business Development and Ventures, and Vice President and General Manager, Refining. Mr. Cabrera holds an M.B.A. in business from the University of Chicago and a B.S. in chemical engineering from the University of Kentucky. We believe Mr. Cabrera s qualifications to sit on our board include his broad technical and management experience in the refining, chemicals and fuels industries and his experience structuring joint ventures and leading acquisition activities in these fields.

BOARD COMPOSITION

Our board of directors may establish the authorized number of directors from time to time by resolution. Eight directors are authorized under the terms of our amended and restated certificate of incorporation and we currently have eight directors, of which five are designated by the current holders of our preferred stock, one is designated by the current holders of our common stock, one is designated by the current holders of our common stock and preferred stock and one also serves as our Chief Executive Officer. Mr. Shai Weiss is the chairman of our board of directors.

Under the terms of our amended and restated certificate of incorporation and the voting agreement among us, the holders of our preferred stock and certain other of our stockholders, members of our board of directors are to be designated as follows: each of Khosla and Virgin, has the right to designate one member; Total Energy Ventures International has the right to designate one member; provided, that in the event that Total Energy Ventures International and its affiliates no longer hold at least 250,000 shares of Series D preferred stock (as adjusted for stock splits, stock dividends, reclassifications and the like), such member shall be designated by holders of a majority of the outstanding Series D preferred stock; LANXESS has the right to designate one member; provided, that in the event that LANXESS and its affiliates no longer hold at least 250,000 shares of Series D-1 preferred stock (as adjusted for stock splits, stock dividends, reclassifications and the like), such member shall be designated by holders of a majority of the outstanding Series D-1 preferred stock; one member shall be designated with the consent of the parties holding a majority of the outstanding Series C preferred stock; one member shall be designated with the consent of the parties holding a majority of the outstanding common stock; one member shall be our Chief Executive Officer; and one member shall be designated by a majority of the

other board designees. Upon the consummation of this offering, all of these provisions will terminate and there will be no further contractual obligations regarding the election of our directors.

In accordance with our amended and restated certificate of incorporation to take effect following the completion of this offering, our board of directors will be divided into three classes with staggered three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. After the completion of this offering, our directors will be divided among the three classes as follows:

- the Class I directors will be Véronique Hervouet, Ron Commander and Ganesh M. Kishore, and their terms will expire at the annual meeting of stockholders to be held in 2011;

- the Class II directors will be Stacy J. Smith, Carlos A. Cabrera and Patrick R. Gruber, and their terms will expire at the annual meeting of stockholders to be held in 2012; and

- the Class III directors will be Shai Weiss and Bruce A. Smith, and their terms will expire at the annual meeting of stockholders to be held in 2013.

Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change of control at our company.

Our amended and restated certificate of incorporation will provide that the authorized number of directors may be changed only by resolution of the board of directors. In addition, our amended and restated certificate of incorporation and amended and restated bylaws will provide that our directors may be removed only for cause by the affirmative vote of the holders of at least a majority of the votes that all our stockholders would be entitled to cast in an annual election of directors. Any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

DIRECTOR INDEPENDENCE

Under Rule 5605 and Rule 5615(b) of The Nasdaq Stock Market, independent directors must comprise a majority of a listed company s board of directors within one year of listing. In addition, The Nasdaq Stock Market rules require that, subject to specified exceptions, each member of a listed company s audit, compensation and nominating and governance committees be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Under Rule 5605(a)(2) of The Nasdaq Stock Market, a director will only qualify as an independent director if, in the opinion of that company s board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. To be considered to be independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (i) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries; or (ii) be an affiliated person of the listed company or any of its subsidiaries.

Our board of directors undertook a review of its composition, the composition of its committees and the independence of each director. Based upon information requested from and provided by each director

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concerning his background, employment and affiliations, including family relationships, our board of directors has determined that, with the exception of Dr. Patrick Gruber, our Chief Executive Officer, none of our directors has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is independent as that term is defined under 5605(a)(2) of The Nasdaq Stock Market. Our board of directors also determined that Messrs. Bruce Smith, Stacy Smith and Carlos Cabrera, who comprise our audit committee, Mr. Shai Weiss and Drs. Ganesh Kishore and Ron Commander, who comprise our compensation committee, and Messrs. Bruce Smith, Carlos Cabrera and Shai Weiss, who comprise our nominating and governance committee, satisfy the independence standards for those committees established by applicable SEC and Nasdaq Stock Market rules. In making this determination, our board of directors considered the relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

BOARD COMMITTEES

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which will have the composition and responsibilities described below upon the closing of this offering.

Audit committee

Our audit committee oversees our corporate accounting and financial reporting process. Among other matters, the audit committee appoints the independent registered public accounting firm; evaluates the independent registered public accounting firm s qualifications, independence and performance; determines the engagement of the independent registered public accounting firm; reviews and approves the scope of the annual audit and the audit fee; discusses with management and the independent registered public accounting firm the results of the annual audit and the review of our quarterly consolidated financial statements; approves the retention of the independent registered public accounting firm to perform any proposed permissible non-audit services; monitors the rotation of partners of the independent registered public accounting firm on our engagement team as required by law; reviews our consolidated financial statements and our management s discussion and analysis of financial condition and results of operations to be included in our annual and quarterly reports to be filed with the SEC; reviews our critical accounting policies and estimates; and annually reviews the audit committee charter and the committee s performance. The current members of our audit committee are Messrs. Bruce Smith, Stacy Smith and Carlos Cabrera, each of whom is a non-employee member of our board of directors. Mr. Bruce Smith serves as the chairman of the committee. Our board of directors has determined that all members of our audit committee meet the requirements for independence and financial literacy under the applicable rules and regulations of the SEC and The Nasdaq Stock Market. Our board of directors has determined that Mr. Bruce Smith is our audit committee financial expert, as that term is defined under the applicable rules of the SEC, and has the requisite financial sophistication as defined under the applicable rules and regulations of The Nasdaq Stock Market. Upon the closing of this offering, the audit committee will operate under a written charter that satisfies the applicable standards of the SEC and The Nasdaq Stock Market.

Compensation committee

Our compensation committee reviews and recommends policies relating to compensation and benefits of our officers and employees. The compensation committee reviews and approves corporate goals and objectives relevant to compensation of our Chief Executive Officer and other executive officers, evaluates the performance of these officers in light of those goals and objectives, and sets the compensation of

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these officers based on such evaluations. The compensation committee also recommends to our board of directors the issuance of stock options and other awards under our stock plans. The compensation committee will review and evaluate, at least annually, the performance of the compensation committee and its members, including compliance of the compensation committee with its charter. The current members of our compensation committee are Mr. Shai Weiss and Drs. Ganesh Kishore and Ron Commander, each of whom is a non-employee member of our board of directors. Mr. Weiss serves as the chairman of the committee. Our board of directors has determined that each of the members of our compensation committee is an independent or outside director under the applicable rules and regulations of the SEC, The Nasdaq Stock Market and the Internal Revenue Code of 1986, as amended, relating to compensation committee independence. Upon the closing of this offering, the compensation committee will operate under a written charter.

Nominating and corporate governance committee

The nominating and corporate governance committee is responsible for making recommendations to our board of directors regarding candidates for directorships and the size and composition of our board of directors. In addition, the nominating and corporate governance committee is responsible for overseeing our corporate governance policies and reporting and making recommendations to our board of directors concerning governance matters. The current members of our nominating and corporate governance committee are Messrs. Bruce Smith, Carlos Cabrera and Shai Weiss, each of whom is a non-employee member of our board of directors. Mr. Weiss serves as the chairman of the committee. Our board of directors has determined that each of the members of our nominating and corporate governance committee is an independent director under the applicable rules and regulations of the SEC and The Nasdaq Stock Market relating to nominating and corporate governance committee independence. Upon the closing of this offering, the nominating and corporate governance committee will operate under a written charter.

Code of business conduct and ethics

Our board of directors will adopt a code of business conduct and ethics in connection with this offering. The code will apply to all of our employees, officers (including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions), including directors and consultants. Upon the effectiveness of the registration statement of which this prospectus forms a part, the full text of our code of business conduct and ethics will be posted on our website at www.gevo.com. We expect that any amendments to the code, or any waivers of its requirements, will be disclosed on our website. The inclusion of our website address in this prospectus does not include or incorporate by reference the information on our website into this prospectus.

Corporate governance guidelines

Our board of directors has adopted corporate governance guidelines to be effective upon the closing of this offering to assist the board in the exercise of its duties and responsibilities and to serve the best interests of our company and our stockholders. Upon the closing of this offering, these guidelines, which provide a framework for the conduct of our board s business, will provide:

- that the board of directors principal responsibility is to oversee the management of the company;
- criteria for board membership;
- that a majority of the members of the board shall be independent directors;
- limits on a board member s service on boards of directors of other public companies;

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Ø for the appointment of a lead independent director;

Ø that the independent directors meet regularly in executive session;

Ø that at least annually, the board and its committees will conduct a self-evaluation; and

Ø that directors have complete access to all officers and employees.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The members of our compensation committee are Mr. Shai Weiss and Drs. Ganesh Kishore and Ron Commander. None of the members of our compensation committee is or has been an officer or employee of our company or had any related person transactions involving us. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee (or other committee serving an equivalent function) of any entity that has one or more executive officers serving on our board of directors or compensation committee.

DIRECTOR COMPENSATION

In May 2010, our board of directors adopted standard director compensation policies. Under these policies, each of our non-employee directors who are not representatives of holders of our preferred stock are entitled to an annual cash retainer of $50,000, with an additional annual cash retainer of $10,000 for service as chair of our audit committee. In addition, we reimburse all of our directors for the reasonable expenses incurred in connection with their attendance at board or committee meetings. Each non-employee director who is not a representative of holders of our preferred stock was granted an initial option to purchase 12,413 shares of our common stock, and, in the event that the company completes an initial public offering, will receive subsequent annual equity grants as provided in their respective offer letters, half of which will be paid in shares of restricted stock and half of which will be paid by the issuance of an option to purchase shares of our common stock. Prior to the adoption of this policy, none of our directors received cash compensation or option grants for their service on our board of directors, with the exception of payments made to former director Dr. Frances Arnold pursuant to a consulting agreement.

DIRECTOR COMPENSATION TABLE

The following table sets forth information regarding compensation earned by our non-employee directors during the fiscal year ended December 31, 2010.

Name	Fees earned or paid in cash ($)	Option awards ($)(1)	All other compensation ($)	Total ($)
Frances Arnold, Ph.D.(2)			20,938	20,938
Shai Weiss				
Ganesh M. Kishore, Ph.D.				
Véronique Hervouet				
Stacy J. Smith(3)	50,000	80,236		130,236
Ron Commander, Ph.D.(4)				

Bruce A. Smith(5)	60,000	80,344	140,344
Carlos A. Cabrera(6)	50,000	80,344	130,344

(footnotes continued on following page)

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(1) The amounts in the Option awards column reflect the aggregate grant date fair value of awards granted in the year ended December 31, 2010 in accordance with FASB ASC Topic 718, assuming no forfeitures. The assumptions, other than forfeitures, used by us with respect to the valuation of option awards are set forth in Note 1 to our consolidated financial statements. As of December 31, 2010, Messrs. Stacy Smith, Bruce Smith and Carlos Cabrera had outstanding option awards to purchase 12,413 shares each.
(2) Represents the aggregate amount paid to Dr. Arnold during fiscal year 2010 related to services provided under her consulting agreement. Dr. Arnold resigned as a director effective June 24, 2010.
(3) Mr. Stacy Smith was appointed to our board of directors in June 2010.
(4) Dr. Commander was appointed to our board of directors in May 2010.
(5) Mr. Bruce Smith was appointed to our board of directors in June 2010. Fees paid include an additional $10,000 paid to Mr. Smith as compensation for his service as chairman of the audit committee.
(6) Mr. Cabrera was appointed to our board of directors in June 2010.

EXECUTIVE COMPENSATION

Compensation discussion and analysis

The following discussion and analysis of compensation arrangements of our named executive officers for the fiscal year ended December 31, 2010 should be read together with the compensation tables and related disclosures set forth below. This discussion contains forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. Actual compensation programs that we adopt may differ materially from currently planned programs as summarized in this discussion.

Named executive officers

In this Compensation Discussion and Analysis, the individuals in the Summary Compensation Table set forth after this Compensation Discussion and Analysis are referred to as the named executive officers. Our named executive officers for the fiscal year ended December 31, 2010 are:

· Dr. Patrick R. Gruber, Chief Executive Officer

· Mark Smith, Chief Financial Officer

· Dr. Christopher Ryan, Executive Vice President, Business Development

· David Black, Executive Vice President, Upstream Business Development

· Michael Slaney, Executive Vice President, Upstream Business Development

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Overview compensation objectives

We have designed our compensation and benefits programs and philosophy to retain, attract and incentivize talented, qualified senior executives to effectively manage and promote the success of our company and to motivate them to pursue corporate objectives. Historically, as a private company, the mix of compensation elements was weighted towards equity elements due to cash capital constraints. However, going forward we have set our compensation programs within an appropriate competitive framework that includes a mix of short-term and long-term components, cash and equity elements and fixed and contingent payments in proportions that we believe will provide appropriate incentives to reward our senior executives and management team. Within this overall philosophy, our objectives are to:

- engage a third-party consulting firm during fiscal year 2011 to work with our compensation committee to establish an appropriate peer group of companies, including our competitors, that we intend to compete with for executive talent and to offer a total compensation program that is benchmarked to be at or above the 75th percentile of such peer group;

- continue to align the financial interests of our executive officers with those of our stockholders by providing significant equity-based awards such as options and restricted stock, while balancing the competing concerns of limiting stockholder dilution and financial accounting compensation expense; and

- continue to use our performance-based approach to managing pay levels to foster a goal-oriented, cooperative and highly motivated management team whose members have a clear understanding of business objectives and shared corporate values.

Compensation for each named executive officer is comprised of a cash-based short-term salary component, reviewed periodically and based on the individual performance of the executive, cash incentive payments based upon the achievement of corporate objectives established by the compensation committee of our board of directors on an annual basis, and a long-term equity component providing long-term compensation based on company performance, as reflected in an increase or decrease in the value of the shares underlying such equity awards. We use the above objectives as a guide in establishing the compensation programs, practices and packages offered to our executive officers and in assessing the proper allocation between long- and short-term incentive compensation and cash and non-cash compensation. However, there is no pre-established policy or target for the allocation between long- and short-term incentive compensation and cash and non-cash compensation.

Historical role of our board of directors

From our formation until the appointment of directors to the compensation committee in September 2007, non-employee members of our board of directors reviewed and approved executive compensation and benefits policies, including the 2006 omnibus securities and incentive plan, or 2006 Plan. Our non-employee directors relied upon their own experiences as directors and officers at other technology companies and public companies that we expected to compete with as well as other subjective information collected from private, venture capital-backed companies in establishing appropriate levels of compensation for our executive officers.

Establishment of, and ongoing review by, our compensation committee

In September 2007, our board of directors established a compensation committee. The current members of our compensation committee are Mr. Shai Weiss and Drs. Ganesh Kishore and Ron Commander. Each of these individuals qualifies as (i) an independent director under the requirements of The

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Nasdaq Stock Market, (ii) a non-employee director under Rule 16b-3 of the Exchange Act, and (iii) an outside director under Section 162(m) of the Code. The compensation committee evaluates, approves, administers and interprets our executives compensation and benefit policies, including our annual executive incentive plan, 2006 Plan and 2010 stock incentive plan, which will become effective upon the closing of this offering, consistent with our compensation program and philosophy.

As a private company, our compensation committee has historically considered compensation data informally collected by the compensation committee members from various other private, venture capital-backed, development-stage companies, and from research of pay practices at similar companies. The committee has also relied on its members business judgment and collective experience with respect to compensation practices at other companies in the technology industry. Our compensation committee determines subjectively what it believes to be the appropriate level and mix of the various compensation components.

Role of executive officers in compensation decisions

For executive officers other than our Chief Executive Officer, the compensation committee has historically sought and considered input from our Chief Executive Officer regarding such executive officers responsibilities, performance and compensation. Specifically, our Chief Executive Officer recommends base salary increases, equity award levels and the performance goals that are used throughout our compensation plans, and advises the committee regarding the compensation program s ability to attract, retain and motivate executive talent. Our compensation committee has and exercises the ability to materially increase or decrease the compensation amounts recommended by our Chief Executive Officer. Our Chief Executive Officer is also involved in our executive compensation process by providing input on the performance targets for our compensation plan, including the relative weight to be assigned to each performance target, and presenting data regarding the impact of the executive compensation programs on our financial performance and statements. Our compensation committee routinely meets in executive session, and our Chief Executive Officer is not permitted to attend during sessions of the compensation committee and sessions of the board of directors where decisions are made regarding his compensation. Once our compensation committee has established our peer group, it is our intention to rely on market parameters for the initial determination of various elements of our executives compensation and to set such initial compensation so that it is at or above the 75th percentile of such peer group, with the compensation committee making adjustments down or up from such market-based determination based, in part, on input from our Chief Executive Officer.

Executive compensation program

Components of our compensation program

Our executive compensation program consists of five components: base salary; annual incentive bonuses; equity-based incentives; benefits; and severance/change of control protection. These components allow us to reward performance throughout the fiscal year and to provide an incentive for executives to appropriately balance their focus on short-term and long-term strategic goals. The compensation committee believes that this set of components is effective and will continue to be effective in achieving the objectives of our compensation program and philosophy. We use short-term compensation, including base salary and annual incentive bonuses, to motivate and reward our key executives on a day-to-day basis in accordance with our general compensation philosophy, which focuses on rewarding performance. Our compensation committee has established a program to set and refine strategic objectives, and to measure performance against those objectives. The compensation committee meets at least annually to evaluate and refine this program. We are in the process of implementing an annual

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review process to measure and provide feedback on individual performance as it relates to the goals we wish to achieve for the company as a whole and each employee individually. The review will assess various combinations of the following factors:

- overall financial performance;
- overall and functional unit expense controls;
- achievement of objectives established during the prior review, including specified cost metrics;
- assessment of professional effectiveness, consisting of a portfolio of competencies that include leadership, commitment, creativity and team accomplishment; and
- experience, knowledge, skills and attitude, focusing on capabilities, capacity and willingness to learn.

Our compensation program seeks to balance each named executive officer s focus between company goals and individual performance. Since the creation of the compensation committee, base salaries, incentive bonuses and equity awards are set based on a combination of corporate objectives and individual performance determined on a subjective, case-by-case basis, and generally have been based on a subjective evaluation by the compensation committee and the Chief Executive Officer, when appropriate, of each individual s contributions. Historically, bonus achievements and certain equity grants were awarded based on a combination of corporate objectives and individual performance. We expect to continue this practice with respect to our executives bonus opportunities so that we can foster a culture of individual high performance with a focus on, and awareness of, the impact on overall company success. The compensation committee applies the same compensation philosophy and standards for each named executive officer, including our Chief Executive Officer. However, compensation levels inevitably vary among the named executive officers because the compensation committee considers individual and corporate factors, as well as the personal knowledge of our compensation committee members with respect to the compensation of similarly situated individuals at companies with which we compete for talent and at companies in the technology industry for whom our committee members also serve on the compensation committee, in order to determine the appropriate level of compensation for each named executive officer. Consequently, if there are differences in the amount or type of compensation paid among the named executive officers, including the Chief Executive Officer, such differences are due primarily to a similar disparity among positions within other companies generally known to our compensation committee members, as well as other factors such as a named executive officer s tenure and individual performance.

We use equity-based incentives to align the interests of our senior executives with those of our stockholders and to promote a longer term performance perspective and positive progress toward achieving our long-term strategy. Total equity ownership for our named executive officers is reviewed at least annually and the data from this review is used as part of the evaluation in determining the appropriate amount of additional grants of equity-based awards.

Finally, we use benefits and change of control and severance arrangements as a means of retaining our employees and reducing the degree to which the possible loss of employment might affect our executive s willingness to take risk and/or pursue strategic relationships and transactions that, while potentially beneficial to our stockholders, might result in the termination of the executive s employment.

Our executives total compensation may vary significantly year to year based on company, functional area and individual performance. Further, the value of equity awards made to our senior executives will vary in value based on our stock price performance.

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Weighting of elements in our compensation program

The allocation among each compensation element is based on a subjective determination by the compensation committee of the importance of each element in meeting our overall objectives. In general, we seek to put a significant amount of each executive s total potential compensation at risk based on corporate and individual performance. We believe that, as is common in the technology sector, stock option and other equity-based awards are a significant compensation-related motivator in attracting and retaining employees and that salary and bonus levels are, in many instances, secondary considerations to many employees, particularly at the executive and managerial levels.

Base salary

We provide a base salary to our named executive officers and other employees to compensate them for services rendered on a day-to-day basis during the fiscal year. Base salary will typically be used to recognize the experience, skills, knowledge and responsibilities required of each named executive officer, and should reflect the overall sustained performance and contributions to us over time. For newly hired executive officers, the compensation committee considers the base salary of the individual at his or her prior employment and any unique personal circumstances that motivated the executive to leave that prior position and join us. Once base pay levels are initially determined, increases in base pay are generally made as appropriate to recognize specific performance achievements.

In 2010, in consideration of the achievements of the company in securing additional private equity financing and the company s planned initial public offering, the compensation committee approved executive base salary increases which were deemed to be competitive and consistent with the performance of the executive team and the growth of our company. These salary increases are reflected in the employment agreements that we entered into with Drs. Gruber and Ryan and Mr. Smith in June 2010, which will become effective upon the closing of this offering. Following the company s acquisition of the class B interests in Gevo Development from CDP, the beneficial owners of CDP, Messrs. Black and Slaney, entered into employment agreements with Gevo effective September 22, 2010. None of our executives is currently party to an employment agreement that provides for automatic or scheduled increases in base salary. However, on a periodic basis, base salaries for our executives, together with other components of compensation, are evaluated.

The following table sets forth information regarding base salaries for fiscal year 2010 and the new base salaries that will become effective upon the consummation of this offering for our named executive officers:

Name of executive officer	2010 base salary rate	New base salary rate (effective upon the closing of this offering)
Patrick R. Gruber, Ph.D(1)	$ 410,000	$ 500,000
Mark Smith	275,000	325,000
Christopher Ryan, Ph.D.	285,000	325,000
David Black(2)	375,000	375,000
Michael Slaney(2)	375,000	375,000

(1) Effective June 1, 2010, Dr. Gruber s base salary was increased from $350,000 to $410,000.

(2) Messrs. Black and Slaney became employees of Gevo, Inc. on September 22, 2010 and their base salary rates will not be affected by the consummation of this offering.

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Annual incentive bonuses

Our compensation philosophy with respect to annual incentive bonuses is consistent with our overall compensation program philosophy. The annual incentive bonus is directed at tying individual compensation to both corporate and individual performance while maintaining market-competitive compensation. Performance, as measured against individual and corporate goals, directly affects the level of bonus payment.

In December 2010, our compensation committee adopted the 2010 incentive bonus plan, under which the annual incentive bonus targets set forth below were used along with corporate and individual performance targets set by our compensation committee and our Chief Executive Officer (except that individual performance targets for our Chief Executive Officer are set exclusively by members of our compensation committee).

For 2010, our compensation committee retained the same target bonus amount as in 2009 for Dr. Gruber and the same target bonus percentages as in 2009 for Dr. Ryan and Mr. Smith. Such bonus targets and the amounts actually paid are subject to adjustment based on company and individual performance as assessed in the judgment of the compensation committee. Messrs. Black and Slaney joined Gevo, Inc. during fiscal year 2010 and were not eligible for incentive bonuses in 2010 under the terms of their respective employment agreements. The table below sets forth the annual incentive bonus targets for each of our named executive officers that were eligible to receive a bonus in 2010:

Name of executive officer	2010 bonus target (as % of 2010 base salary)
Patrick R. Gruber, Ph.D.	18.3%
Mark Smith	30.0
Christopher Ryan, Ph.D.	30.0
David Black(1)	
Michael Slaney(1)	

(1) Under the terms of their employment agreements, Messrs. Black and Slaney became eligible to receive annual incentive bonuses in an amount up to 40% of their respective base salaries beginning in calendar year 2011.

During 2010, our compensation committee, with input from our Chief Executive Officer, established five categories of corporate performance targets: (i) targets related to securing access to ethanol plants for future retrofit to isobutanol production, (ii) targets related to technology development including (a) the production of isobutanol at laboratory scale from cellulosic biomass using a modified version of our licensed biocatalyst, (b) the development of hydrocarbon technology applications of isobutanol with future technology partners and (c) the development of a commercial version of our biocatalyst for deployment into the demonstration plant, (iii) targets related to the company s production capabilities, including the upgrade of the demonstration plant and completion of demonstration simulations and processing runs using corn mash, (iv) targets related to the negotiation of future supply agreements with customers representing more than 30 MGPY of isobutanol production, including a future supply agreement with an airline customer for the supply of renewable jet fuel and (v) targets related to securing financing for the acquisition of our initial production facility and future financing needs, including preparations for this offering. No weighting was assigned to the individual performance targets. In December 2010, our compensation committee determined that the company had achieved 90% of its corporate performance targets and the company performance factor was set at 90%, out of 100%.

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Our compensation committee retains discretion to approve payments in excess of the target amounts to named executive officers, as appropriate, based on their achievement of individual goals established for each executive by the Chief Executive Officer (or, in the case of individual goals for the Chief Executive Officer, the compensation committee). These individual goals are established based on the Chief Executive Officer s (or in the case of individual goals for the Chief Executive Officer, the compensation committee s) evaluation of each executive s position within the company, the corporate targets over which that executive has control or influence and the market practices of other technology companies. Examples of individual goals include achieving departmental budgets, meeting testing objectives, achieving technical milestones, meeting business development goals and achieving or maintaining a professional standard. The determination of whether and to what extent a specific executive officer has achieved his individual goals and the amount of additional bonus, if any, to be paid is made by the Chief Executive Officer (or the compensation committee in the case of the Chief Executive Officer). Any such determinations made by the Chief Executive Officer are subject to review and approval by the compensation committee. In 2010, the compensation committee determined that each of Drs. Gruber and Ryan and Mr. Smith would receive a discretionary bonus payment in excess of their target amounts equal to $82,500, $45,000 and $30,000, respectively. The compensation committee approved these discretionary amounts due to the level of overall achievement of established milestones and in recognition of the executives efforts to prepare the company to meet future technical and financial milestones.

The following formula can be used to calculate the incentive bonus payment to be made to a named executive officer:

Bonus Amount = (Base Salary) x (Target Percentage) x (Company Performance Factor) +

(Discretionary Individual Performance Bonus, if any)

Name of executive officer	Bonus target (base salary x target %) ($)	2010 Company performance factor (%)	2010 Bonus Based on Achievement of Company Performance Factor	Individual bonus ($)	Total Bonus payment ($)
Patrick R. Gruber, Ph.D.	75,000	90.0	67,500	82,500	150,000
Mark Smith	82,500	90.0	74,250	30,000	104,250
Christopher Ryan, Ph.D.	85,500	90.0	76,950	45,000	121,950
David Black(1)					
Michael Slaney(1)					

(1) Under the terms of their employment agreements, Messrs. Black and Slaney became eligible to receive annual incentive bonuses in an amount up to 40% of their respective base salaries beginning in calendar year 2011.

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In June 2010, we entered into employment agreements with each of Drs. Gruber and Ryan and Mr. Smith which will become effective upon the closing of this offering. These agreements will supersede and terminate the employment and offer letter agreements that we had previously entered into with these named executive officers. Following the acquisition of the class B interests in Gevo Development from CDP, Messrs. Black and Slaney entered into employment agreements with Gevo, Inc. which became effective on September 22, 2010. Under the terms of the new employment agreements, each executive is entitled to receive an annual incentive bonus based on the achievement of certain business goals set by our board of directors on an annual basis. Annual incentive bonus eligibility commences in 2011 for Messrs. Black and Slaney. Under the terms of the new employment agreements, the annual incentive bonus targets for our named executive officers are as follows:

Name of executive officer	Incentive bonus target (as a % of base salary)
Patrick R. Gruber, Ph.D.	50.0%
Mark Smith	40.0
Christopher Ryan, Ph.D.	40.0
David Black(1)	40.0
Michael Slaney(1)	40.0

(1) The employment agreements with Messrs. Black and Slaney are currently effective and are not contingent on the consummation of this offering.

In addition to the annual incentive bonus, the new employment agreements provide that additional bonus amounts may be paid, at the discretion of our board of directors, to reflect each executive s contributions to the accomplishment of our long-range business goals, the success of the corporate strategies in which the executive participates and the unique services that the executive provides in connection with increasing stockholder value.

We believe that our annual incentive bonus plans help to attract and motivate our executives, and to align the compensation payable to our executives with our corporate objectives, thereby maximizing stockholder value. By evaluating our bonus program for executives each fiscal year, we believe we provide sufficient and attainable incentives for our executives that align with both our financial and nonfinancial goals.

Equity incentive compensation

We believe that our long-term performance is best facilitated through a culture of executive ownership that encourages long-term investment by our executive officers in our equity, thereby better aligning the executives interests with the interests of our stockholders. To encourage this ownership culture, we typically make an initial equity award of stock options to new employees and periodic grants at other times, as approved by the compensation committee. As a private company, our compensation committee has historically recommended, and our board of directors has historically approved, all equity grants to our employees including our executive officers. These grants have an exercise price that is at least equal to the fair market value of our common stock on the date of grant, as determined by our board of directors. Grants of options in 2010 were typically subject to a four-year vesting schedule with 1/4th of the grant vesting upon the first anniversary of the vesting commencement date and the remainder of the shares vesting at a rate of 1/48th of the total shares subject to the option each month after the vesting commencement date, subject to the continued service of the executive officer. In keeping with our market-competitive philosophy, our compensation committee established the foregoing vesting schedules for 2010 because it determined that such vesting represents market practice in our industry based on their experience. For the options granted to our named executive officers in 2010, vesting commenced upon the executive officer s respective date of hire.

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The size of the initial stock option award is determined based on the executive s position with us and takes into account the executive s base salary and other compensation. The initial stock option awards are intended to provide the executive with an incentive to build value in the organization over an extended period of time while remaining consistent with our overall compensation philosophy.

On September 22, 2010, in connection with the purchase of the class B interests in Gevo Development, Messrs. Black and Slaney became employees of Gevo, Inc. In connection with the formation of Gevo Development in September 2009, Gevo, Inc. issued a warrant to CDP to acquire 858,000 shares of the common stock of Gevo, Inc. with an exercise price of $2.70. CDP is beneficially owned 50% by Mr. Black and 50% by Mr. Slaney. 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 our consolidated statements of operations through September 21, 2010, as none of the performance milestones had been met. Therefore, the lowest aggregate fair value of the award at September 21, 2010 was zero. On September 22, 2010, Messrs. Black and Slaney 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 vested on September 22, 2010. The remaining warrant shares will vest over a two-year period beginning on September 22, 2010, subject to acceleration and/or termination under certain circumstances. We valued the warrant, using the option-pricing method, at approximately $13,956,000 on the modification date of September 22, 2010 and recognized 50% of this amount, $6,978,000, as stock-based compensation on that date. We will recognize the remaining 50% of the warrant s value over the 24 month vesting period which began on September 22, 2010. For presentation purposes, as Messrs. Black and Slaney are the beneficial owners of CDP, we have attributed 50% of the value of the warrant on the modification date of September 22, 2010, or $6,978,000 each, to Messrs. Black and Slaney.

Our compensation committee considers a number of factors in determining the amount of periodic equity incentive awards, if any, granted to our executives, including:

- internal equity among executives;
- the number of shares subject to outstanding options, both vested and unvested, held by our executives;
- the vesting schedule of the unvested stock options held by our executives;
- whether each executive s equity holdings provide adequate incentive and retention value;
- individual performance;
- tenure with the company; and
- the nature of each executive s role at our company.

In June 2010, our named executive officers received the following stock option grants, each with an exercise price of $10.07 per share: Dr. Gruber (105,000), Dr. Ryan (44,000) and Mr. Smith (19,500). The size of each grant was based on the compensation committee s consideration of the factors listed above, as well as compensation data informally collected by the compensation committee members from various other private, venture capital-backed, development-stage companies, and from research of pay practices at similar companies. Similar to our initial stock option grants, these grants are intended to continue to provide the executive with an incentive to build value in the organization

over an extended period of time while remaining consistent with our overall compensation philosophy. Messrs. Black and Slaney have not been awarded any stock option grants. Messrs. Black and Slaney are the beneficial owners of CDP, which has been granted a warrant to purchase 858,000 shares of the company s common stock at an exercise price of $2.70 per share. The warrant issued to CDP was granted in September 2009 and amended and restated in September 2010, as discussed above.

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In June 2010, we entered into employment agreements with each of Drs. Gruber and Ryan and Mr. Smith which will become effective upon the closing of this offering. These agreements will supersede and terminate the employment and offer letter agreements that we had previously entered into with these named executive officers. In September 2010, we entered into employment agreements with Messrs. Black and Slaney, which became effective immediately. Under the terms of the new employment agreements, each executive is entitled to receive an annual equity incentive award consisting of restricted stock and/or stock options. The new employment agreements with our named executive officers provide for annual equity incentive awards with the following fair market values on the date of grant:

Name of executive officer	Annual equity incentive award
Patrick R. Gruber, Ph.D.	$ 600,000
Mark Smith	200,000
Christopher Ryan, Ph.D.	200,000
David Black(1)	
Michael Slaney(1)	

(1) Under the terms of their employment agreements, in the event that the company has consummated an initial public offering, Messrs. Black and Slaney will each become eligible to receive annual equity incentive awards of $200,000 beginning in April 2012.

As a privately owned company, there has been no market for our common stock. Accordingly, in 2009 and 2010, we had no program, plan or practice pertaining to the timing of stock option grants to executive officers coinciding with the release of material nonpublic information. The compensation committee intends to adopt a formal policy regarding the timing of grants in connection with this offering.

Benefits

We provide the following benefits to our named executive officers on the same basis provided to all of our Gevo, Inc. employees:

Ø health, dental and vision insurance;

Ø life insurance, short- and long-term disability, accidental death and dismemberment;

Ø a 401(k) plan; and

Ø a medical and dependent care flexible spending account.

We believe these benefits are consistent with companies with which we compete for employees.

Severance/termination-based compensation

Our compensation committee provides our executives with termination protection when it determines that such protection is necessary to attract or retain an executive. In June 2010, we entered into employment agreements with each of Drs. Gruber and Ryan and Mr. Smith which will become effective upon the closing of this offering. These agreements will supersede and terminate the employment and offer letter agreements that we had previously entered into with these named executive officers. In September 2010, we entered into employment agreements with

Messrs. Black and Slaney, which became effective immediately. Under the terms of the new employment agreements, each executive officer will be entitled to receive severance payments and benefits in the event that he is terminated without cause or resigns for good reason. The new employment agreements also provide payments to these named executive officers in the event of a change of control and provide for certain benefits in the event that an executive is terminated upon or within 90 days following a change of control.

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The severance payments and benefits that are payable under these agreements are further described below in the sections entitled Employment Arrangements and Potential Payments upon Termination or Change of Control.

Tax considerations

Section 162(m) of the Code, generally disallows a tax deduction for compensation in excess of $1.0 million paid to certain named executive officers. Qualifying performance-based compensation is not subject to the deduction limitation if specified requirements are met. We generally intend to structure the performance-based portion of our executive compensation, when feasible, to comply with exemptions in Section 162(m) so that the compensation remains tax deductible to us. However, our board of directors may, in its judgment, authorize compensation payments that do not comply with the exemptions in Section 162(m) when it believes that such payments are appropriate to attract and retain executive talent.

2010 SUMMARY COMPENSATION TABLE

The following table summarizes the compensation earned by our Chief Executive Officer, Chief Financial Officer and each of our three other most highly compensated executive officers during the year ended December 31, 2010. In this prospectus, we refer to these officers as our named executive officers.

Name and principal position	Year	Salary ($)(1)	Option awards ($)(2)	Non-equity incentive plan compensation ($)(3)	All other compensation ($)	Total ($)
Patrick R. Gruber, Ph.D.	2010	384,385	681,765	150,000	54,504(4)	1,270,654
	2009	363,462	427,820	75,000	57,025(4)	
Chief Executive Officer, Director						923,307
Mark L. Smith	2010	275,000	129,527	104,250	11,069(5)	519,846
Chief Financial Officer	2009	285,577	26,904	52,140	10,577(5)	375,198
Christopher Ryan, Ph.D.	2010	285,000	294,923	121,950	31,107(6)	732,980
Executive Vice President, Business Development	2009	153,462(7)	318,028	29,461	286,210(6)	787,161
David Black(8)	2010	87,981(9)			7,336,122(10)	7,424,103
Executive Vice President, Upstream Business Development						
Michael Slaney(8)	2010	87,981(9)			7,336,122(10)	7,424,103
Executive Vice President, Upstream Business Development						

(1) For information regarding the annual salary rate of the named executive officers, see Employment Arrangements below. We pay salary to our employees on a bi-weekly basis and, in calendar years 2010 and 2009, we made 26 and 27 such bi-weekly payments, so certain of the named executive officers received aggregate salary payments in calendar year 2009 that exceeded their annual salary rate.

(2) The amounts in the Option Awards column reflect the aggregate grant date fair value of awards granted during each respective year for each named executive officer, in accordance with FASB ASC Topic 718, assuming no forfeitures. The assumptions, other than forfeitures, used by us with respect to the valuation of option awards are set forth in Note 1 to our financial statements included elsewhere in this prospectus.

(footnotes continued on following page)

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(3) The bonuses earned on the basis of performance relative to target bonus metrics in calendar year 2010 and 2009 have been reported in this column as non-equity incentive plan compensation. See Executive Compensation Compensation Discussion and Analysis above for a discussion of how the bonus program worked in operation. See also Grants of Plan-Based Awards in Fiscal Year 2010 under the column Estimated Possible Payouts Under Non-Equity Incentive Plan Awards for the target amounts named executive officers were eligible to earn in 2010. Our board of directors retained discretion to approve payments in excess of the target amounts and exercised that discretion to make certain payments to Drs. Gruber and Ryan and Mr. Smith in 2010. The dollar amounts reported in this column were paid out as cash payments in December 2010 and January 2010, respectively.

(4) For 2010, represents $12,250 for company match on 401(k) plan, $29,122 for payments to maintain a corporate apartment and $13,132 for gross-up tax assistance provided. For 2009, represents $12,250 for company match on 401(k) plan, $25,154 for payments to maintain a corporate apartment, $11,344 for gross-up tax assistance provided and $8,277 for other personal benefits.

(5) For 2010, represents $11,069 for company match on 401(k) plan. For 2009, represents $10,577 for company match on 401(k) plan.

(6) For 2010, represents $12,250 for company match on 401(k) plan, $4,306 for gross-up tax assistance provided and $14,551 in relocation assistance. For 2009, represents $3,837 for company match on 401(k) plan, $12,214 for gross-up tax assistance provided and $270,159 in relocation assistance. $52,954 of the relocation assistance provided in 2009 represents costs paid for Dr. Ryan s moving expenses and relocation costs. The remaining $217,205 of relocation assistance is for amounts paid to a relocation company in connection with the sale of Dr. Ryan s house. The relocation company purchased Dr. Ryan s house in 2009 and sold it in 2010. We initially paid the relocation company $312,498 as an estimate of the difference between the purchase price they paid and the sales price they would receive, plus sales, carrying and other costs for the house. When the relocation company sold the house in 2010, the actual difference between the purchase price and sales price, plus sales, carrying and other costs for the house was only $217,205, and the relocation company refunded our overpayment of $95,293.

(7) Dr. Ryan joined us in June 2009. The 2009 salary reflected for Dr. Ryan represents actual salary earned from employment with us in 2009, which was based on an annual base salary of $285,000.

(8) Messrs. Black and Slaney entered into employment agreements with Gevo, Inc. on September 22, 2010. 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. Please see Other Material Agreements Gevo Development, LLC above. Payments made to CDP for purchase of the class B interests have been excluded from the amounts included in the table above. CDP is beneficially owned 50% by Mr. Black and 50% by Mr. Slaney.

(9) Messrs. Black and Slaney joined Gevo, Inc. in September 2010. The 2010 salaries reflected for Messrs. Black and Slaney represent actual salaries earned from employment with Gevo, Inc. in 2010, which were based on annual base salaries of $375,000.

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(10) In conjunction with the formation of Gevo Development in September 2009, Gevo, Inc. issued a warrant to CDP to acquire 858,000 shares of the common stock of Gevo, Inc. with an exercise price of $2.70. 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 our consolidated statements of operations through September 21, 2010, as none of the performance milestones had been met. Therefore, the lowest aggregate fair value of the award at September 21, 2010 was zero. On September 22, 2010, Messrs. Black and Slaney 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 vested on September 22, 2010. The remaining warrant shares will vest over a two-year period which began on September 22, 2010, subject to acceleration and/or termination under certain circumstances. We valued the warrant, using the option-pricing method, at approximately $13,956,000 on the modification date of September 22, 2010 and recognized 50% of this amount, $6,978,000, as stock-based compensation on that date. We will recognize the remaining 50% of the warrant s value over the 24 month vesting period which began on September 22, 2010. As CDP is beneficially owned 50% by Mr. Black and 50% by Mr. Slaney, for presentation purposes, we have shown the full value of the warrant as calculated on the modification date, September 22, 2010, of $13,956,000 as 50% attributable to each of Messrs. Black and Slaney. The amount shown of $7,336,122 for each of Messrs. Black and Slaney is comprised of $6,978,000, which represents 50% of the full value of the warrant to CDP as calculated on the modification date of September 22, 2010, and $358,122, representing 50% of the total management fees paid to CDP during 2010.

GRANTS OF PLAN-BASED AWARDS IN 2010 TABLE

All options granted to our named executive officers are non-statutory stock options. The exercise price per share of each option granted to our named executive officers was determined to be equal to at least the fair market value of our common stock by our board of directors on the date of the grant. All options were granted under our 2006 omnibus securities and incentive plan, as amended, as described below in the section entitled Employee Benefit and Stock Plans 2006 omnibus securities and incentive plan, as amended.

The following table shows information regarding grants of equity awards to our named executive officers during the year ended December 31, 2010.

Name	Grant date	Estimated possible payouts under non-equity incentive plan awards($)(1) Target	All other option awards; number of securities underlying options (#)	Exercise or base price of option awards ($/share)	Grant date fair value of option awards ($)(2)
Patrick R. Gruber, Ph.D.	6/3/2010	75,000	105,000	10.07	681,765
Mark Smith	6/3/2010	82,500	19,500	10.07	129,527
Christopher Ryan, Ph.D.	6/3/2010	85,500	44,000	10.07	294,923

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(1) Represents awards granted under our 2010 cash incentive bonus program, which were based on achievement of certain milestones in fiscal year 2010. This column shows the awards that were possible at the target level of performance. The column titled Non-Equity Incentive Plan Compensation in the Summary Compensation Table shows the actual awards earned in fiscal year 2010 by our named executive officers under the 2010 cash incentive bonus program. These amounts were paid in December 2010.

(2) The amounts set forth in the Grant Date Fair Value of Option Awards column reflect the aggregate grant date fair value of awards determined in accordance with FASB ASC Topic 718, assuming no forfeitures. The assumptions, other than forfeitures, used in determining such amounts are described in Note 1 to our consolidated financial statements included elsewhere in this prospectus.

OUTSTANDING EQUITY AWARDS AT 2010 FISCAL YEAR-END

The following table shows the grants of stock options to our named executive officers that were outstanding on December 31, 2010, the last day of our fiscal year.

			Option awards			
Name	**Grant date**	**Vesting commencement date(1)**	**Number of securities underlying unexercised options (#) exercisable**	**Number of securities underlying unexercised options (#) unexercisable**	**Option exercise price ($)**	**Option expiration date**
Patrick R. Gruber, Ph.D.	5/2/2007	5/2/2007(2)	253,115	100,068	0.46	5/2/2017
	7/1/2008	7/1/2008(3)	195,725	128,234	1.16	7/1/2018
	11/16/2009	5/2/2007(3)	217,499	25,291	2.70	11/16/2019
	6/3/2010	5/2/2007(3)	94,063	10,937	10.07	6/3/2020
Mark Smith	12/04/2008	11/5/2008	65,104	59,896	1.16	12/04/2018
	11/16/2009	11/5/2008	7,813	7,187	2.70	11/16/2019
	6/3/2010	11/5/2008	10,156	9,344	10.07	6/3/2020
Christopher Ryan, Ph.D.	11/16/2009	6/15/2009	65,625	109,375	2.70	11/16/2019
	6/3/2010	6/15/2009	16,500	27,500	10.07	6/3/2020

(1) Unless otherwise noted, each option vests as to 1/4th of the total number of shares subject to the option on the first anniversary of the vesting commencement date, and 1/48th of the total number of shares subject to the option shall vest monthly thereafter until all shares are vested. Vesting is accelerated in certain situations. See the section entitled Employment Arrangements below.

(2) Each option vests as to 1/5th of the total number of shares subject to the option on the first anniversary of the vesting commencement date, and 1/60th of the total number of shares subject to the option shall vest monthly thereafter until all shares are vested. Vesting is accelerated in certain situations. See the section entitled Employment Arrangements below.

(3) 1/48th of the total number of shares subject to the option shall vest monthly after the vesting commencement date until all shares are vested. Vesting is accelerated in certain situations. See the section entitled Employment Arrangements below.

OPTION EXERCISES IN 2010 TABLE

None of our named executive officers exercised stock options during 2010.

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PENSION BENEFITS

We do not maintain any defined benefit pension plans.

NONQUALIFIED DEFERRED COMPENSATION

We do not maintain any nonqualified deferred compensation plans.

EMPLOYMENT ARRANGEMENTS

We had previously entered into an employment agreement with Dr. Gruber and offer letter agreements with Dr. Ryan and Mr. Smith. In connection with this offering, we have entered into new employment agreements with Drs. Gruber and Ryan and Mr. Smith to take effect upon the consummation of this offering. We have also entered into employment agreements with Messrs. Black and Slaney, each of which became effective on September 22, 2010.

Patrick Gruber, Ph.D.

On July 1, 2008, we entered into an employment agreement with Dr. Patrick Gruber, our Chief Executive Officer and a member of our board of directors, which provided for an annual base salary of $350,000, and an incentive bonus of up to $75,000 per year based on his achievement of certain milestones determined by our board of directors on an annual basis. Pursuant to that employment agreement, Dr. Gruber was granted options to purchase 323,959 shares of our common stock under the 2006 Plan. Effective June 1, 2010, our compensation committee approved an increase in Dr. Gruber s annual base salary to $410,000.

On June 4, 2010, we entered into a new employment agreement with Dr. Gruber, which will become effective upon the closing of this offering. This agreement will supersede and terminate Dr. Gruber s previous employment agreement upon the closing of this offering. Under the new employment agreement, Dr. Gruber s base salary is $500,000 per year, subject to annual review and adjustment by our board of directors. Dr. Gruber is eligible to receive an annual bonus of up to 50% of his base salary based on the achievement of certain business goals set by our board of directors on an annual basis, and may receive additional bonus amounts at the discretion of our board of directors. Pursuant to the terms of the new employment agreement, Dr. Gruber is eligible to receive an annual incentive award with a fair market value equal to $600,000 on the date of grant, consisting of restricted stock and/or stock options, and may receive additional stock awards at the discretion of our board of directors, not to exceed $850,000 for the first year. Dr. Gruber is also entitled to participate in or receive benefits under all of our existing and future incentive programs and will continue to be eligible to participate in all employee benefit plans, including retirement plans, health care plans and fringe benefit plans, that are afforded generally to our executive officers.

If Dr. Gruber s employment is terminated as a result of his disability or death, he or his estate will be entitled to receive his full base salary through the date of termination as well as an additional lump-sum payment equal to his annual base salary at the rate in effect at the time of such termination. If Dr. Gruber s employment is terminated without cause (other than by death or disability), or if he terminates his employment with us for good reason, he will be entitled to receive his full base salary through the date of termination, a bonus equal to the average of the annual bonuses paid to him in each of the three years preceding the termination, prorated to the date of termination, and, provided that he executes a general release of claims in favor of the company within 60 days of the date of termination, he shall also receive a lump-sum payment equal to two years of his base salary then in effect plus 200% of his eligible bonus for the preceding year. Additionally, Dr. Gruber and his family will receive continued

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coverage under any company sponsored group health plan in which he was enrolled at the time of his termination for a period of 12 months following his termination date and, immediately prior to such termination date, all of his outstanding unvested stock options and other equity awards shall immediately vest. Cause is defined as Dr. Gruber s conviction of a felony, willful misconduct or dishonesty materially injurious to the company or a material failure to consistently discharge his duties under the employment agreement, unless resulting from his disability, provided that no act or failure to act will be considered willful if it is done, or omitted, in good faith and with the reasonable belief that such action or inaction is in the best interests of the company. Good reason is defined as a material diminishment of Dr. Gruber s base salary, authority, duties or responsibilities, a relocation without his consent that increases his one-way commute to work by at least fifty miles or a material breach by us of the employment agreement.

The new employment agreement also provides certain payments and benefits to Dr. Gruber in circumstances involving a change of control, as described below in the section entitled Potential Payments upon Termination and Change of Control.

Mark Smith

On October 2, 2008, we entered into an offer letter agreement with Mark Smith, our Chief Financial Officer, which provided for an annual base salary of $275,000 and a grant of options to purchase 125,000 shares of our common stock under the 2006 Plan.

On June 4, 2010, we entered into a new employment agreement with Mr. Smith, which will become effective upon the closing of this offering. This agreement will supersede and terminate Mr. Smith s previous offer letter agreement upon the closing of this offering. Under the new employment agreement, Mr. Smith s base salary is $325,000 per year, subject to annual review and adjustment by our board of directors. Mr. Smith is eligible to receive an annual bonus of up to 40% of his base salary based on the achievement of certain business goals set by our board of directors on an annual basis and may receive additional bonus amounts at the discretion of our board of directors. Pursuant to the terms of the new employment agreement, Mr. Smith is eligible to receive an annual incentive award with a fair market value equal to $200,000 on the date of grant, consisting of restricted stock and/or stock options, and may receive additional stock awards at the discretion of our board of directors, not to exceed $395,000 for the first year. Mr. Smith is also entitled to participate in or receive benefits under all of our existing and future incentive programs and will continue to be eligible to participate in all employee benefit plans, including retirement plans, health care plans and fringe benefit plans, that are afforded generally to our executive officers.

If Mr. Smith s employment is terminated as a result of his disability or death, he or his estate will be entitled to receive his full base salary through the date of termination as well as an additional lump-sum payment equal to his annual base salary at the rate in effect at the time of such termination. If Mr. Smith s employment is terminated without cause (other than by death or disability), or if he terminates his employment with us for good reason, he will be entitled to receive his full base salary through the date of termination, a bonus equal to the average of the annual bonuses paid to him in each of the three years preceding the termination, prorated to the date of termination, and, provided that he executes a general release of claims in favor of the company within 60 days of the date of termination, he shall also receive a lump-sum payment, equal to one year of his base salary then in effect plus 100% of his eligible bonus for the preceding year. Additionally, Mr. Smith and his family will receive continued coverage under any company sponsored group health plan in which he was enrolled at the time of his termination for a period of six months following his termination date and, immediately prior to such termination date, all of his outstanding unvested stock options and other equity awards shall

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immediately vest. The definitions of cause and good reason are consistent with the definitions set forth in our new employment agreement with Dr. Gruber, as described above.

The new employment agreement also provides certain payments and benefits to Mr. Smith in circumstances involving a change of control, as described below in the section entitled Potential Payments upon Termination and Change of Control.

Christopher Ryan, Ph.D.

On May 22, 2009, we entered into an offer letter agreement with Dr. Christopher Ryan, our Executive Vice President of Business Development, which provided for an annual base salary of $285,000 and a grant of options to purchase 168,000 shares of our common stock under the 2006 Plan. Dr. Ryan was actually granted options to purchase 175,000 shares of our common stock under the 2006 Plan, the additional options were issued due to subjective factors and to account for dilution based on the timing of the grant.

On June 4, 2010, we entered into a new employment agreement with Dr. Ryan, which will become effective upon the closing of this offering. This agreement will supersede and terminate Dr. Ryan s previous offer letter agreement upon the closing of this offering. Under the new employment agreement, Dr. Ryan s base salary is $325,000 per year, subject to annual review and adjustment by our board of directors. Dr. Ryan is eligible to receive an annual bonus of up to 40% of his base salary based on the achievement of certain business goals set by our board of directors on an annual basis and may receive additional bonus amounts at the discretion of our board of directors. Pursuant to the terms of the new employment agreement, Dr. Ryan is eligible to receive an annual incentive award with a fair market value equal to $200,000 on the date of grant, consisting of restricted stock and/or stock options, and may receive additional stock awards at the discretion of our board of directors, not to exceed $395,000 for the first year. Dr. Ryan is also entitled to participate in or receive benefits under all of our existing and future incentive programs and will continue to be eligible to participate in all employee benefit plans, including retirement plans, health care plans and fringe benefit plans, that are afforded generally to our executive officers.

If Dr. Ryan s employment is terminated as a result of his disability or death, he or his estate will be entitled to receive his full base salary through the date of termination as well as an additional lump-sum payment equal to his annual base salary at the rate in effect at the time of such termination. If Dr. Ryan s employment is terminated without cause (other than by death or disability), or if he terminates his employment with us for good reason, he will be entitled to receive his full base salary through the date of termination, a bonus equal to the average of the annual bonuses paid to him in each of the three years preceding the termination, prorated to the date of termination, and, provided that he executes a general release of claims in favor of the company within 60 days of the date of termination, he shall also receive a lump-sum payment, equal to one year of his base salary then in effect plus 100% of his eligible bonus for the preceding year. Additionally, Dr. Ryan and his family will receive continued coverage under any company sponsored group health plan in which he was enrolled at the time of his termination for a period of six months following his termination date and, immediately prior to such termination date, all of his outstanding unvested stock options and other equity awards shall immediately vest. The definitions of cause and good reason are consistent with the definitions set forth in our new employment agreement with Dr. Gruber, as described above.

The new employment agreement also provides certain payments and benefits to Dr. Ryan in circumstances involving a change of control, as described below in the section entitled Potential Payments upon Termination and Change of Control.

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David Black

On September 22, 2010, we entered into an employment agreement with Mr. Black, which became effective immediately. Under the employment agreement, Mr. Black s base salary is $375,000 per year, subject to annual review and adjustment by our board of directors. As of 2011, Mr. Black is eligible to receive an annual bonus of up to 40% of his base salary based on the achievement of certain business goals set by our board of directors on an annual basis and may receive additional bonus amounts at the discretion of our board of directors. Beginning in April 2012, provided that we have consummated an initial public offering, Mr. Black will be eligible to receive an annual incentive award with a fair market value equal to $200,000 on the date of grant, consisting of restricted stock and/or stock options. Whether or not a public offering has closed, Mr. Black may also receive additional stock awards at the discretion of our board of directors. Mr. Black is also entitled to participate in or receive benefits under all of our existing and future incentive programs and is eligible to participate in all employee benefit plans, including retirement plans, health care plans and fringe benefit plans, that are afforded generally to our executive officers.

If Mr. Black s employment is terminated as a result of his disability or death, he or his estate will be entitled to receive his full base salary through the date of termination. In the event that the company has consummated an initial public offering, Mr. Black, or his estate, will also be entitled to a lump-sum payment equal to his annual base salary at the rate in effect at the time of such termination, provided that Mr. Black has executed a general release of claims in favor of the company within 60 days of the date of any termination resulting from disability.

If Mr. Black s employment is terminated without cause (other than by death or disability), or if he terminates his employment with us for good reason, he will be entitled to receive his full base salary through the date of termination and a bonus equal to the average of the annual bonuses paid to him in each of the three years preceding the termination, prorated to the date of termination. Mr. Black and his family will receive continued coverage under any company sponsored health plan in which he was enrolled at the time of his termination for a period of six months following his termination date and, immediately prior to such termination date, all of Mr. Black s outstanding unvested stock options and other equity awards shall immediately vest. Additionally, provided that he has executed a general release of claims in favor of the company within 60 days of the date of termination, Mr. Black will be entitled to a lump-sum payment which varies based upon the date of termination and whether the company has consummated an initial public offering. If the termination occurs before March 31, 2012 and a public offering has not closed, Mr. Black will be entitled to a payment equal to the greater of (i) six months of his base salary in effect at the time of termination plus 50% of his eligible annual bonus in effect at the time of termination, and (ii) his base salary payable through March 31, 2012 plus 100% of his eligible annual bonus in effect at the time of termination, multiplied by a fraction with a numerator equal to the number of months remaining until March 31, 2012 and a denominator equal to 12. If the termination occurs before March 31, 2012 and a public offering has closed, Mr. Black will entitled to a payment equal to the greater of (i) twelve months of his base salary in effect at the time of termination plus 100% of his eligible annual bonus in effect at the time of termination, and (ii) his base salary payable through March 31, 2012 plus 100% of his eligible annual bonus in effect at the time of termination, multiplied by a fraction with a numerator equal to the number of months remaining until March 31, 2012 and a denominator equal to 12. If the termination occurs after March 31, 2012 and a public offering has not closed, Mr. Black will be entitled to a payment equal to six months of his base salary in effect at the time of termination plus 50% of his eligible annual bonus in effect at the time of termination. If the termination occurs after March 31, 2012 and a public offering has closed, Mr. Black will be entitled to a payment equal to twelve months of his base salary in effect at the time of termination plus 100% of his eligible annual bonus in effect at the time of termination. The definitions of cause and good reason are

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consistent with the definitions set forth in our new employment agreement with Dr. Gruber, as described above, except that before the closing of this offering, cause shall instead have the meaning of cause under applicable law.

The employment agreement also provides certain payments and benefits to Mr. Black in circumstances involving a change of control, as described below in the section entitled Potential Payments upon Termination and Change of Control.

Michael Slaney

On September 22, 2010, we entered into an employment agreement with Mr. Slaney, which became effective immediately. Under the employment agreement, Mr. Slaney s base salary is $375,000 per year, subject to annual review and adjustment by our board of directors. As of 2011, Mr. Slaney is eligible to receive an annual bonus of up to 40% of his base salary based on the achievement of certain business goals set by our board of directors on an annual basis and may receive additional bonus amounts at the discretion of our board of directors. Beginning in April 2012, provided that we have consummated an initial public offering, Mr. Slaney will be eligible to receive an annual incentive award with a fair market value equal to $200,000 on the date of grant, consisting of restricted stock and/or stock options. Whether or not a public offering has closed, Mr. Slaney may also receive additional stock awards at the discretion of our board of directors. Mr. Slaney is also entitled to participate in or receive benefits under all of our existing and future incentive programs and is eligible to participate in all employee benefit plans, including retirement plans, health care plans and fringe benefit plans, that are afforded generally to our executive officers.

If Mr. Slaney s employment is terminated as a result of his disability or death, he or his estate will be entitled to receive his full base salary through the date of termination. In the event that the company has consummated an initial public offering, Mr. Slaney, or his estate, will also be entitled to a lump-sum payment equal to his annual base salary at the rate in effect at the time of such termination, provided that Mr. Slaney has executed a general release of claims in favor of the company within 60 days of the date of any termination resulting from disability.

If Mr. Slaney s employment is terminated without cause (other than by death or disability), or if he terminates his employment with us for good reason, he will be entitled to receive his full base salary through the date of termination and a bonus equal to the average of the annual bonuses paid to him in each of the three years preceding the termination, prorated to the date of termination. Mr. Slaney and his family will receive continued coverage under any company sponsored health plan in which he was enrolled at the time of his termination for a period of six months following his termination date and, immediately prior to such termination date, all of Mr. Slaney s outstanding unvested stock options and other equity awards shall immediately vest. Additionally, provided that he has executed a general release of claims in favor of the company within 60 days of the date of termination, Mr. Slaney will be entitled to a lump-sum payment which varies based upon the date of termination and whether the company has consummated an initial public offering. If the termination occurs before March 31, 2012 and a public offering has not closed, Mr. Slaney will be entitled to a payment equal to the greater of (i) six months of his base salary in effect at the time of termination plus 50% of his eligible annual bonus in effect at the time of termination, and (ii) his base salary payable through March 31, 2012 plus 100% of his eligible annual bonus in effect at the time of termination, multiplied by a fraction with a numerator equal to the number of months remaining until March 31, 2012 and a denominator equal to 12. If the termination occurs before March 31, 2012 and a public offering has closed, Mr. Slaney will entitled to a payment equal to the greater of (i) twelve months of his base salary in effect at the time of termination plus 100% of his eligible annual bonus in effect at the time of termination, and (ii) his base salary payable through

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March 31, 2012 plus 100% of his eligible annual bonus in effect at the time of termination, multiplied by a fraction with a numerator equal to the number of months remaining until March 31, 2012 and a denominator equal to 12. If the termination occurs after March 31, 2012 and a public offering has not closed, Mr. Slaney will be entitled to a payment equal to six months of his base salary in effect at the time of termination plus 50% of his eligible annual bonus in effect at the time of termination. If the termination occurs after March 31, 2012 and a public offering has closed, Mr. Slaney will be entitled to a payment equal to twelve months of his base salary in effect at the time of termination plus 100% of his eligible annual bonus in effect at the time of termination. The definitions of cause and good reason are consistent with the definitions set forth in our new employment agreement with Dr. Gruber, as described above, except that before the closing of this offering, cause shall instead have the meaning of cause under applicable law.

The employment agreement also provides certain payments and benefits to Mr. Slaney in circumstances involving a change of control, as described below in the section entitled Potential Payments upon Termination and Change of Control.

POTENTIAL PAYMENTS UPON TERMINATION AND CHANGE OF CONTROL

In June 2010, we entered into new employment agreements with each of Drs. Gruber and Ryan and Mr. Smith which will become effective upon the closing of this offering. These agreements will supersede and terminate the employment and offer letter agreements that we had previously entered into with these named executives. In September 2010, we entered into employment agreements with Messrs. Black and Slaney, which became effective immediately, but whose change of control provisions only become effective upon the closing of an initial public offering. Under the new employment agreements, in the event of a change of control, each of these executives (if still employed by the company) is entitled to receive a lump-sum payment equal to two times the sum of (i) his annual base salary in effect immediately prior to such change of control and (ii) 100% of his eligible bonus for the year preceding the change of control. If upon or within ninety days after a change of control, any such executive is terminated without cause, or terminates his employment with us for good reason, he will keep the change of control payment described above and he and his family will be entitled to receive continued coverage under any company sponsored group health plan in which he was enrolled at the time of his termination for a period of six months following his termination date (or twelve months in the case of Dr. Gruber), but he will not be entitled to any other termination benefits. On the date any such executive becomes entitled to receive a change of control payment, all of his outstanding unvested stock options and other equity awards shall immediately vest. For the avoidance of doubt, CDP s amended and restated warrant to purchase common stock of the company, which is beneficially owned 50% by Mr. Black and 50% by Mr. Slaney, shall not be accelerated by this provision, and will instead continue to be governed by its own vesting terms. Change of control is defined as the acquisition by any person or group of all or substantially all of our assets through sale, lease, transfer, conveyance or other disposition, or the acquisition by any person or group of beneficial ownership of more than 40% of our outstanding voting stock.