Gevo, Inc.
Form 424B5
June 27, 2012
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Registration No. 333-180097

This preliminary prospectus supplement relates to an effective registration statement under the Securities Act of 1933, but is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are 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 SUPPLEMENT (SUBJECT TO COMPLETION, DATED JUNE 27, 2012)

(To Prospectus dated May 8, 2012)

Shares

Common Stock

We are offering shares of our common stock pursuant to this prospectus supplement and the accompanying prospectus. Concurrently with this offering of common stock, we are offering $ aggregate principal amount of our % Convertible Senior Notes due 2022 (the convertible notes) (or a total of $ aggregate principal amount of convertible notes if the underwriters for the concurrent convertible notes offering exercise in full their option to purchase additional convertible notes) pursuant to a separate prospectus supplement. This common stock offering is not contingent upon the concurrent convertible notes offering, and the concurrent convertible notes offering is not contingent upon this common stock offering.

Our common stock is traded on the NASDAQ Global Market under the symbol GEVO. On June 26, 2012, the last reported sale price of our common stock on the NASDAQ Global Market was $8.77 per share.

Investing in our common stock involves a high degree of risk. Before buying any shares, you should review carefully the risks and uncertainties described under the heading Risk factors beginning on page S-17 of this prospectus supplement, on page 5 of the accompanying prospectus and in the documents incorporated by reference into this prospectus supplement.

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

	per share	total
Public Offering Price	$	$
Underwriting Discount(1)	$	$

Proceeds, before expenses, to Gevo, Inc.	$	$

(1) We have also agreed to reimburse the underwriters for certain out-of-pocket expenses incurred by them. See Underwriting for more information on expense reimbursement.

Delivery of the shares of common stock is expected to be made on or about , 2012. We have granted the underwriters an option to purchase up to an additional shares of our common stock at the public offering price, less underwriting discounts and commissions payable by us, within 30 days of the date of this prospectus, to cover over-allotments, if any. If the underwriters exercise their option in full, the total underwriting discount will be $ and our total proceeds, before expenses, will be $.

Joint Book-Running Managers

UBS Investment Bank **Piper Jaffray**

Baird

Prospectus Supplement dated , 2012.

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About this prospectus supplement

This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the U.S. Securities and Exchange Commission (the SEC) utilizing a shelf registration process. This document is in two parts. The first part is this prospectus supplement, including the documents incorporated by reference herein, which describes the specific terms of this offering. The second part, the accompanying prospectus, including the documents incorporated by reference therein, provides more general information. Generally, when we refer to the prospectus, we are referring to both parts of this document combined. We urge you to carefully read this prospectus supplement and the accompanying prospectus, and the documents incorporated by reference herein and therein, before buying any of the securities being offered under this prospectus supplement. This prospectus supplement may add or update information contained in the accompanying prospectus and the documents incorporated by reference therein. To the extent that any statement we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference therein that were filed before the date of this prospectus supplement, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference therein.

You should rely only on the information contained in this prospectus supplement and the accompanying prospectus or incorporated by reference herein or therein. We have not authorized anyone to provide you with different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus supplement and the accompanying prospectus. You should not rely on any unauthorized information or representation. This prospectus supplement is an offer to sell only the securities offered hereby, and only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus supplement and the accompanying prospectus is accurate only as of the date on the front of the applicable document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the date of delivery of this prospectus supplement or the accompanying prospectus, or the date of any sale of a security.

Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus to the Company, we, us, our, and Gevo refer to Gevo, Inc., a Delaware corporation, and its consolidated subsidiaries.

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Conventions that apply to this prospectus supplement

This prospectus supplement and the accompanying prospectus contain estimates and other information concerning our target markets that are based on industry publications, surveys and forecasts, including those generated by SRI Consulting, a division of Access Intelligence, LLC, Chemical Market Associates, Inc., the U.S. Energy Information Association (the EIA), the International Energy Agency (the IEA), the Renewable Fuels Association (the RFA), and Nexant, Inc. (Nexant). Certain target market sizes presented in this prospectus supplement have been calculated by us (as further described below) based on such information. This information involves a number of assumptions and limitations and you are cautioned not to give undue weight to this information. Please read the section of this prospectus supplement entitled Cautionary statement regarding forward-looking statements. 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 the section entitled Risk factors beginning on page S-17. These and other factors could cause actual results to differ materially from those expressed in these publications, surveys and forecasts.

With respect to calculation of product market volumes:

- product market volumes are provided solely to show the magnitude of the potential markets for isobutanol and the products derived from it. They are not intended to be projections of our actual isobutanol production or sales;
- product market volume calculations for fuels markets are based on data available for the year 2009 (the most current data available from the IEA);
- product market volume calculations for chemicals markets are based on data available for the year 2011 (the most current data available from Nexant); and
- volume data with respect to target market sizes is derived from data included in various industry publications, surveys and forecasts generated by the EIA, the IEA and Nexant.

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

- we calculated the size of the market for isobutanol as a gasoline blendstock and oxygenate by multiplying the world gasoline market volume by an estimated 12.5% by volume isobutanol blend ratio;
- we calculated the size of the specialty chemicals markets by substituting volumes of isobutanol equivalent to the volume of products currently used to serve these markets;
- we calculated the size of the petrochemicals and hydrocarbon fuels markets by calculating the amount of isobutanol that, if converted into the target products at theoretical yield, would be needed to fully serve these markets (in substitution for the volume of products currently used to serve these markets); and

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

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

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Prospectus supplement summary

This summary is not complete and does not contain all of the information that you should consider before investing in the securities offered by this prospectus. You should read this summary together with the entire prospectus supplement and the accompanying prospectus, including our financial statements, the notes to those financial statements and the other documents that are incorporated by reference in this prospectus supplement and the accompanying prospectus, before making an investment decision. See the Risk factors section of this prospectus supplement beginning on page S-17 for a discussion of the risks involved in investing in our securities.

GEVO, INC.

Our Business

We are a renewable chemicals and next generation biofuels company. Our overall strategy is to commercialize bio-based 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. Initially, we intend to produce and sell isobutanol from renewable feedstocks. Isobutanol is a four carbon alcohol that can be sold directly for use as a specialty chemical in the production of solvents, paints, and coatings or as a value-added fuel blendstock. Isobutanol can also be converted into butenes using straightforward dehydration chemistry deployed in the refining and petrochemicals industries today. The convertibility of isobutanol into butenes is important because butenes are primary hydrocarbon building blocks used in the production of lubricants, rubber, plastics, fibers, other polymers and hydrocarbon fuels. 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 70 billion gallons per year (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 specialty chemical market for isobutanol of approximately 1.1 BGPY, and a potential fuel blendstock market for isobutanol of approximately 40 BGPY, we believe that the potential global market for isobutanol is greater than 1,000 BGPY.

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

In order to produce and sell isobutanol made from renewable sources, we have developed the Gevo Integrated Fermentation Technology® (GIFT®), an integrated technology platform for the efficient production and separation of 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

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existing approximately 23 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. 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-based products used in the chemicals and fuels markets today.

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

Direct Use Markets

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

Specialty Chemicals

- Isobutanol has direct applications as a specialty chemical. High-purity and chemical-grade isobutanol can be used as a solvent and chemical intermediate. We plan to produce high-purity and chemical-grade isobutanol that can be used in the existing butanol markets as a cost-effective, environmentally sensitive alternative to petroleum-based products.

- We believe that our cost-efficient production route will allow for significant expansion of the historical isobutanol markets within existing butanol markets through displacing n-butanol, a related compound to isobutanol that is currently sold into butanol markets.

- We estimate the total addressable worldwide market for isobutanol as a specialty chemical to be approximately 1.1 BGPY, or approximately $6.7 billion annually.

Gasoline Blendstocks

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

- Based on isobutanol s high energy content and low water solubility, as well as testing completed by the National Marine Manufacturers Association, the Outdoor Power Equipment Institute and Briggs & Stratton, we believe that isobutanol has direct applications as a blendstock in high value specialty fuels markets serving marine, small engine and sports vehicle markets.

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

Butene and Hydrocarbon Markets

Beyond direct use as a specialty chemical and fuel blendstock, isobutanol can be converted into butenes, para-xylene (PX), and many hydrocarbon fuels and specialty blendstocks, offering substantial potential for additional demand.

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Butenes

- 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.

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

- Chemical-grade isobutanol can be sold to isobutylene and n-butene (butenes) chemicals users for conversion into lubricants, methyl methacrylate and rubber applications.

- We estimate the total addressable worldwide market for butenes to be approximately 2.3 BGPY, or approximately $8.1 billion annually.

Para-xylene and Polyethylene Terephthalate

- Isobutanol can be used to produce PX and its derivatives, including polyesters, which are used in the beverage and food packaging and fibers markets. PX is a key raw material in polyethylene terephthalate (PET) production.

- In June 2011, we announced that we had successfully produced fully renewable and recyclable PET in cooperation with Toray Industries, Inc. (Toray Industries). Working directly with Toray Industries, we employed prototypes of commercial operations from the petrochemical and refining industries to make PX from isobutanol. Toray Industries used our bio-PX and commercially available renewable mono ethylene glycol to produce fully renewable PET films and fibers. Additionally, on June 1, 2012, we entered into a definitive agreement with Toray Industries for the joint development of an integrated supply chain for the production of bio-PET. Toray Industries is a large PET resin, film and fiber manufacturing company interested in offering its customers, some of whom are multinational brandowners, a bio-based alternative.

- We have also entered into an agreement with The Coca-Cola Company (Coca-Cola) to create renewable PET from our isobutanol, seeking to accelerate the development of Coca-Cola s second-generation PlantBottle packaging made from 100% plant-based materials. Our objective under the agreement is to take our technology from laboratory-scale to commercial-scale and support Coca-Cola s efforts to lead the beverage industry away from fossil fuel-based packaging by offering an alternative made completely from renewable raw materials.

- We estimate the global market for PET to be approximately 50 million metric tons, or approximately $100 billion annually, of which approximately 30% will be used for plastic bottles.

Jet Fuel

- We have demonstrated the conversion of our isobutanol into a renewable jet fuel blendstock, which meets current ASTM International (ASTM) and U.S. military synthetic jet fuel blendstock performance and purity requirements. We are working to obtain an ASTM standard specification for the use of such jet fuel blendstock in commercial aviation. We have already presented positive test results from fit-for-purpose testing of our alcohol-to-jet fuel (ATJ) to ASTM s alcohol-to-jet task force. Full certification of our ATJ is expected in 2013.

Ø We have been awarded a contract by the Defense Logistics Agency (DLA) to supply ATJ to the U.S. Air Force (the USAF). The contract calls for us to supply the USAF with up to 11,000 gallons of ATJ, which will be used to support engine testing and a feasibility flight demonstration using an A-10 aircraft. The ATJ is shipped to Wright-Patterson Air Force Base, where the USAF will finish

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laboratory testing and begin engine testing. The ATJ is being produced from isobutanol at our hydrocarbon processing demonstration plant near Houston, Texas, in partnership with South Hampton Resources, Inc. (South Hampton Resources). We shipped initial quantities of ATJ to the USAF in December 2011 and have since shipped over 10,000 gallons of ATJ to the USAF. We expect the feasibility flight demonstration will occur by the end of June 2012.

Ø Commercial airlines are also currently looking to form strategic alliances with biofuels companies to meet their fuel supply demands.

Ø We estimate the global market for ATJ to be approximately 75 BGPY, or approximately $200 billion annually.

Other Hydrocarbon Fuels

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

Our Retrofit Strategy

We plan to commercialize our isobutanol through a strategy of retrofitting existing ethanol production facilities to produce isobutanol. This approach allows us to project substantially lower capital outlays and a faster commercial deployment schedule than would be associated with the construction of new plants. We developed our technology platform to be compatible with the existing approximately 23 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. 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 U.S.

We believe that our isobutanol not only offers a compelling value proposition to customers in the chemicals and fuels markets, but should also provide current ethanol plant owners with an opportunity to increase their operating margins through the retrofit of their existing facilities in joint venture settings. In addition, we plan to sell our isobutanol primarily under long-term off-take agreements, such as our agreement with Sasol Chemical Industries, acting through its Sasol Solvents Division (Sasol). This approach, which is a departure from the traditional model for ethanol sales, is expected to enhance operating margin stability by incorporating minimum volume amounts and pricing terms that adjust based on feedstock costs, thus improving the overall business model for existing ethanol plant owners. Ethanol is often sold under marketing agreements that do not include volume requirements or pricing formulas that adjust based on feedstock costs, which can result in volatile operating margins that are a significant operational challenge for current ethanol plant owners.

Through our exclusive alliance with ICM, Inc. (ICM), a leading engineering firm that has designed over 50% of current U.S. operating ethanol production capacity, which the RFA estimates to be over 13 BGPY, we are developing our retrofit equipment package and have successfully demonstrated the production of isobutanol via the retrofit of a one million gallon per year (MGPY) ethanol demonstration facility in St. Joseph, Missouri. We plan to secure access to existing ethanol production facilities through joint ventures, tolling partnerships and direct acquisitions. As we establish our retrofit strategy, we may consider licensing our technology and engineering package to expand overall access to production capacity. We will then work with ICM to deploy GIFT® through retrofit of these production facilities.

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In September 2010, we acquired a 22 MGPY ethanol production facility in Luverne, Minnesota (the Agri-Energy Facility). In partnership with ICM, we commenced the retrofit of the Agri-Energy Facility in 2011, and commenced start-up operations for the production of isobutanol at this facility in May 2012. We plan to commence commercial production of isobutanol at the Agri-Energy Facility by June 30, 2012. However, technical completion of the retrofit and the initial shipments of isobutanol from the Agri-Energy Facility are not expected until the third quarter of 2012. The Agri-Energy Facility is a traditional dry-mill facility, which means that it uses dry-milled corn as a feedstock. As of May 31, 2012, we have incurred capital costs of approximately $41.3 million on the retrofit of the Agri-Energy Facility. This amount includes a number of additional expenditures that were unique to the design of the retrofit at the Agri-Energy Facility, such as additional equipment necessary in order to switch between ethanol and isobutanol production, modifications to increase the potential production capacity of GIFT® at the Agri-Energy Facility and the establishment of an enhanced yeast seed train to accelerate the adoption of improved yeast at the Agri-Energy Facility and at future plants. The capital costs for the enhanced yeast seed train, which will allow us to maintain direct oversight over our yeast material and provide on-site yeast production in the future, have been approximately $10 million. We do not anticipate installing an advanced yeast seed train at each future retrofit site. In the event that we encounter significant production challenges during the start-up of isobutanol production, we believe that we will have the ability, subject to regulatory factors, to switch from isobutanol production back to ethanol production. We believe that the ability to switch between isobutanol and ethanol production mitigates, depending on market conditions, certain significant risks associated with start-up operations for isobutanol production. While we believe we will have the ability to reverse the retrofit and switch between ethanol and isobutanol production at the Agri-Energy Facility, there is no guarantee that this will be the case.

Until May 24, 2012, when we commenced start-up operations for the production of isobutanol at the Agri-Energy Facility, we derived revenue from the sale of ethanol, distiller s grains and other related products produced as part of the ethanol production process at this facility. Continued ethanol production during the retrofit process has allowed us to retain local staff for the future operation of the plant, maintain the equipment and generate cash flow. However, the production of ethanol is not our intended business and our future profitability depends on our ability to produce and market isobutanol, not on continued production and sales of ethanol. Now that we have commenced start-up operations for the production of isobutanol, we do not expect to generate future significant revenues from the sale of ethanol at the Agri-Energy Facility. Accordingly, the historical operating results of our subsidiary, Agri-Energy, LLC (Agri-Energy), and the operating results reported during the retrofit to isobutanol production will not be indicative of future operating results for Agri-Energy or Gevo once commercial isobutanol production commences at this facility.

On June 15, 2011, we entered into an isobutanol joint venture agreement (the Joint Venture Agreement) with Redfield Energy, LLC, a South Dakota limited liability company (Redfield), under which we have agreed to work with Redfield to retrofit Redfield s approximately 50 MGPY ethanol production facility located near Redfield, South Dakota (the Redfield Facility) for the commercial production of isobutanol. We will be responsible for all costs associated with the retrofit of the Redfield Facility. If certain conditions have been met following completion of the retrofit, commercial production of isobutanol at the Redfield Facility will begin upon the earlier of the date on which certain production targets have been met or the date the parties mutually agree that commercial isobutanol production at the Redfield Facility will be commercially viable. We will be entitled to a percentage of Redfield s profits, losses and distributions once commercial production of isobutanol has begun.

We anticipate that, through a combination of cash on hand and debt and equity financings, including this offering of common stock and the concurrent convertible notes offering, we will require approximately $150 million to complete the retrofits to commercial isobutanol production of both the

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Agri-Energy and Redfield Facilities and to fund operations through December 31, 2013. As of March 31, 2012, we had a cash balance of $73.6 million.

We are currently in discussions with several other ethanol plant owners that have expressed an interest in entering into joint ventures, tolling arrangements or selling their facilities to us for retrofit to produce isobutanol, and we have entered into a letter of intent with BioFuel Energy Corp. (BioFuel) to jointly explore opportunities for the production of isobutanol using our technology in plants owned by BioFuel. Collectively, these ethanol plant owners represent over 1.7 BGPY of ethanol capacity. However, there can be no assurance that we will be able to acquire access to ethanol plants from these owners. We have also entered into a non-binding collaborative agreement with the Malaysian government s East Coast Economic Region Development Council, Malaysian Biotechnology Corp and the State Government of Terengganu with the intent to develop a cellulosic biomass isobutanol facility in Southeast Asia.

Customer Agreements

We have commenced start-up operations and plan to commence commercial production of isobutanol at our Agri-Energy Facility by June 30, 2012. We expect our initial production of isobutanol at the Agri-Energy Facility to be directed to serve the high-purity and chemical-grade markets under our international off-take and distribution agreement with Sasol, and to provide introductory volumes to the specialty fuel blendstock markets in the U.S. under our commercial off-take agreement with Mansfield Oil Company (Mansfield). We also intend to produce and sell isobutanol distiller s grains (iDGs) under our off-take and marketing agreement with Land O Lakes Purina Feed LLC (Land O Lakes Purina Feed).

As we bring additional isobutanol production facilities online and our production capacity increases, we plan to transition to selling increased isobutanol volumes under direct customer relationships, certain of which we have already established. As of June 15, 2012, we have entered into the following arrangements:

Off-take Agreements

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

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

- ***Land O Lakes Purina Feed LLC.*** In December 2011, we entered into an off-take and marketing agreement with Land O Lakes Purina Feed for the sale of iDGs produced by the Agri-Energy

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Facility. Land O Lakes Purina Feed provides farmers and ranchers with an extensive line of agricultural supplies (feed, seed, and crop protection products) and services. Land O Lakes Purina Feed will be the exclusive marketer of our iDGs and modified wet distiller grains for the animal feed market. The agreement has an initial three-year term following the first commercial sales of iDGs with automatic one-year renewals thereafter unless terminated by one of the parties. Further, we plan to work with Land O Lakes Purina Feed to explore opportunities to upgrade the iDGs for special value-added applications in feed markets.

Supply and Commercialization Agreements

- ***U.S. Air Force.*** In September 2011, we were awarded a solicitation by the DLA to supply ATJ to the USAF. The DLA sources and provides nearly 100% of the consumable items the U.S. military needs to operate. The solicitation provides that we will supply the USAF with up to 11,000 gallons of ATJ, which will be used to support engine testing and a feasibility flight demonstration using an A-10 aircraft. This is the first ATJ contract awarded by the DLA. The ATJ is being produced from isobutanol at our hydrocarbon processing demonstration plant near Houston, Texas, in partnership with South Hampton Resources.

- ***The Coca-Cola Company.*** In November 2011, we entered into a joint research, development, license and commercialization agreement with Coca-Cola to create renewable PX from our isobutanol. The objective of the agreement is to accelerate the development of Coca-Cola s second-generation PlantBottle packaging made from 100% plant-based materials. We will work with Coca-Cola to enable and deliver an integrated system to produce renewable PX, a key building block toward Coca-Cola s goal of creating all of their packaging from renewable materials.

- ***LANXESS.*** In May 2010, we entered into a non-binding heads of agreement outlining the terms of a future supply agreement with LANXESS Inc. (LANXESS), an affiliate of LANXESS Corporation, a stockholder in our company. LANXESS is a specialty chemical company with global operations that currently produces butyl rubber from petrochemical-based isobutylene. Isobutylene is a type of butene that can be produced from isobutanol through straightforward, well-known chemical processes. Pursuant to the heads of agreement, LANXESS has proposed to purchase at least 20 MGPY of our isobutanol for an initial term of 10 years, with an option to extend the term for an additional five years. The pricing under our heads of agreement with LANXESS includes a mechanism that adjusts for future changes in the cost of our feedstock. In January 2011, we also entered into an exclusive supply agreement with LANXESS pursuant to which LANXESS has granted us an exclusive first right to supply LANXESS and its affiliates with certain of their requirements of bio-based isobutanol during the initial 10-year term. Our exclusive first right to supply bio-based isobutanol to LANXESS and its affiliates will be subject to the terms of the future supply agreement that we intend to enter into with LANXESS, as described above.

- ***Toray Industries.*** In June 2012, we entered into a definitive agreement with Toray Industries for the joint development of an integrated supply chain for the production of bio-PET. In connection with the agreement, Toray Industries has committed to convert our bio-PX into bio-PET for non-competitive end-user partners and to purchase demonstration volumes of bio-PX to be produced at a pilot plant, facilitating our progress toward a full-scale commercial relationship. Under the agreement, Toray Industries will also contribute capital for the design and purchase of pilot plant processes and equipment for the production of bio-PX.

Letters of Intent

- ***TOTAL PETROCHEMICALS.*** In February 2010, we entered into a non-binding letter of intent with TOTAL PETROCHEMICALS USA, Inc. (TOTAL PETROCHEMICALS), an affiliate of

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

Ø ***Toray Industries*.** In April 2010, we received a non-binding letter of interest from 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 bio-based PX made from our isobutanol, potentially building to 5,000 metric tons within five years. Production of 5,000 metric tons of PX is expected to require approximately 2.3 million gallons of isobutanol. In June 2011, we announced that we had successfully produced fully renewable and recyclable PET in cooperation with Toray Industries.

Ø ***United Airlines*.** In July 2010, we entered into a non-binding letter of intent with United Airlines, Inc. (United Airlines), one of the largest international airlines in the world. This letter of intent sets forth the initial terms for a supply agreement for renewable jet fuel, produced from our isobutanol, to serve United Airlines major hub airport in Chicago. The letter of intent contemplates pricing of the renewable jet fuel will be indexed to the cost of corn, the feedstock that we will use to produce our isobutanol, and natural gas.

Isobutanol has a higher price than ethanol today because of the higher value markets that isobutanol can serve. In addition, we have been successful in including pricing mechanisms that are linked to the cost of our feedstocks in certain key agreements, including our international off-take and distribution agreement with Sasol. This pricing mechanism allows 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 our 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, only our agreements with Sasol, Mansfield, Land O Lakes Purina Feed, Coca-Cola, the DLA on behalf of the USAF, our joint development agreement with Toray Industries and our exclusive supply agreement with LANXESS are binding and there can be no assurance that we will be able to enter into definitive supply agreements with any of the other potential customers listed above, or attract additional customers based on our arrangements with the petrochemical companies and large brand owners discussed above.

Competitive Strengths

Our competitive strengths include:

Ø ***Renewable platform molecule to serve multiple large drop-in markets.*** We believe that the butenes produced from our isobutanol will serve as renewable alternatives in 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 intermediate product 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.

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- ***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 biocatalysts are able to achieve a product yield on sugar of approximately 94% of the 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 relatively low capital cost route to isobutanol. Furthermore, we believe that our cost-efficient 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-efficient retrofits of existing ethanol facilities, which allows us to leverage the existing approximately 23 BGPY of global operating ethanol production capacity. Our retrofit strategy supports a rapid and relatively low capital cost route to isobutanol production. As of May 31, 2012, we have incurred capital costs of approximately $41.3 million on the retrofit of the Agri-Energy Facility. This amount includes a number of additional expenditures that were unique to the design of the retrofit at the Agri-Energy Facility and has not affected our estimate that future retrofits of grain ethanol plants to isobutanol production using GIFT® will cost approximately $1 per gallon of existing annual ethanol capacity. This projection translates to approximately $50 million for a 50 MGPY ethanol facility and approximately $90 million for a 100 MGPY ethanol facility. These projected retrofit capital expenditures are substantially less than estimates for new plant construction for the production of advanced biofuels, including cellulosic ethanol. 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 a several 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 (iDGs). We believe that the sale of our iDGs will enable us to offset a significant portion of our feedstock costs. We are currently approved to sell our iDGs as animal feed under a self-affirmed Generally Regarded As Safe (GRAS) process conducted via third-party scientific review based on publicly available data. In order to improve the value of our iDGs , we are also in the process of obtaining U.S. Food and Drug Administration (FDA) approval for the marketing of our iDGs . We believe obtaining FDA approval will increase the value of our iDGs by offering customers of our iDGs further assurance of the food safety of our iDGs .

- ***GIFT® demonstrated at commercially relevant scale.*** We have completed the retrofit of a one MGPY ethanol facility in St. Joseph, Missouri with our proprietary engineering package designed in partnership with ICM and we have successfully produced isobutanol at this facility using our biocatalysts, 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 have 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.

- ***Off-take agreements and strategic relationships with chemicals, fuels, animal feed and engineering industry leaders in place.*** We have entered into off-take agreements and strategic relationships with global industry leaders to accelerate the execution of our commercial deployment strategy both in the U.S. and internationally. These agreements establish immediate demand for our isobutanol to meet the planned production from our Agri-Energy Facility. To facilitate the adoption of our technology at existing ethanol plants, we have entered into an exclusive alliance with ICM. We expect our

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relationships with entities such as Sasol, Mansfield, Land O Lakes Purina Feed, LANXESS, Toray Industries, the USAF, TOTAL PETROCHEMICALS and United Airlines to contribute to the development of new chemical and fuel market applications of our isobutanol and the development of markets for our animal feed co-product, iDGs . To enable the integration of cellulosic feedstocks into our isobutanol production process, we have obtained an exclusive license from Cargill, Incorporated to integrate its proprietary biocatalysts into the GIFT® system. To accelerate the adoption of isobutanol as a platform molecule and to support the development of hydrocarbon products derived from our isobutanol, we have developed a hydrocarbon demonstration plant near Houston, Texas in partnership with South Hampton Resources.

Ø ***Experienced team with a proven track record.*** Our management team offers an exceptional combination of scientific, operational and managerial expertise and our Chief Executive Officer, Dr. Patrick Gruber, has spent over 20 years developing and successfully commercializing industrial biotechnology products. Across the company, our employees have over 450 combined years of biotechnology, synthetic biology and bio-based 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 bio-based 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 U.S. and international levels.

Certain Relationships

On December 21, 2011, we entered into an Amendment Agreement with Dr. Patrick Gruber, our Chief Executive Officer. Under the terms of this agreement, Dr. Gruber is eligible to receive a cash incentive award of $1.5 million in the event that we successfully complete a qualified equity or debt financing transaction, or series of transactions, resulting in aggregate gross proceeds to us of at least $50 million, subject to Dr. Gruber s continued employment with us. Whether a particular financing transaction, or series of transactions, constitutes a qualified financing resulting in the payment of the incentive award shall be determined by our board of directors, in its sole discretion.

Concurrent Convertible Notes Offering

Concurrently with this offering of common stock, we are offering $ aggregate principal amount of convertible notes (or a total of $ aggregate principal amount of convertible notes if the underwriters for the concurrent convertible notes offering exercise in full their option to purchase, within 30 days from the date of the initial issuance of the convertible notes, up to an additional $ in principal amount of convertible notes at the offering price less the underwriting discount) pursuant to a separate prospectus supplement.

This common stock offering is not contingent upon the concurrent convertible notes offering, and the concurrent convertible notes offering is not contingent upon this common stock offering. We expect to raise approximately $ million in aggregate net proceeds from the two offerings. However, amounts sold in each offering may increase or decrease based on market conditions relating to a particular security. We cannot assure you that we will complete the concurrent convertible notes offering.

Unless we specifically state otherwise, the information in this prospectus supplement assumes the completion of the concurrent convertible notes offering, that the underwriters for the concurrent

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convertible notes offering do not exercise their option to purchase additional convertible notes and that the underwriters for this common stock offering do not exercise their option to purchase additional shares of common stock.

Our 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, Colorado 80112, and our telephone number is (303) 858-8358. We maintain an Internet website at *www.gevo.com*. Information contained in or accessible through our website does not constitute part of this prospectus supplement or the accompanying prospectus.

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The offering

Common stock offered by us	shares of common stock (or shares of common stock if the underwriters exercise in full their option to purchase additional shares).
Common stock outstanding after this offering	shares of common stock (or shares of common stock if the underwriters exercise in full their option to purchase additional shares).(1)
Over-allotment option	shares of common stock.
Use of proceeds	We expect the net proceeds from this offering will be approximately $ million (or $ million if the underwriters exercise in full their option to purchase additional shares) after deducting underwriting discounts and commissions, as described in Underwriting, and estimated offering expenses payable by us. We intend to use the net proceeds from this offering to fund the cash consideration payable to complete the retrofit of the Agri-Energy Facility that we acquired in September 2010. A portion of the net proceeds of this offering may be used for detailed design work in preparation for the retrofit of the Redfield Facility to isobutanol production pursuant to our joint venture agreement that we entered into in June 2011. 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 down certain of our long-term debt obligations and expenses associated with litigation. Pending such uses, we intend to invest the net proceeds in demand deposit accounts or short-term, investment grade securities. See Use of proceeds.

(1) The number of shares of our common stock to be outstanding immediately after the closing of this offering is based on 26,789,598 shares of common stock outstanding as of June 15, 2012 and excludes, as of that date:

- 3,462,295 shares of common stock issuable upon the exercise of outstanding stock options at a weighted average exercise price of $5.90 per share;
- 1,229,998 shares of common stock issuable upon the exercise of outstanding common stock warrants at a weighted average price of $4.60 per share;
- 1,089,706 shares of common stock available for future grant under our 2010 Stock Incentive Plan (the 2010 Plan);
- 1,276,879 shares of common stock available for issuance pursuant to our Employee Stock Purchase Plan (ESPP); and

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Ø shares of common stock initially issuable upon the conversion of the convertible notes offered in the concurrent convertible notes offering.

NASDAQ Global Market symbol	GEVO
Risk factors	This investment involves a high degree of risk. See Risk factors beginning on page S-17 of this prospectus supplement for a discussion of factors you should carefully consider before deciding to invest in our common stock.

Concurrently with this offering of common stock, we are offering $ aggregate principal amount of convertible notes (or a total of $ aggregate principal amount of convertible notes if the underwriters for the concurrent convertible notes offering exercise in full their option to purchase, within 30 days from the date of the initial issuance of the convertible notes, up to an additional $ in principal amount of convertible notes at the offering price less the underwriting discount) pursuant to a separate prospectus supplement.

This common stock offering is not contingent upon the concurrent convertible notes offering, and the concurrent convertible notes offering is not contingent upon this common stock offering. We expect to raise approximately $ million in aggregate net proceeds from the two offerings. However, amounts sold in each offering may increase or decrease based on market conditions relating to a particular security. We cannot assure you that we will complete the concurrent convertible notes offering.

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Summary financial information

In the tables below, we provide you with a summary of our historical consolidated financial information. The information is only a summary, and you should read it together with the financial information incorporated by reference in this document. See Incorporation of certain documents by reference on page S-70 of this prospectus supplement and Where you can find additional information on page S-69 of this prospectus supplement. The audited statements of operations data for the years ended December 31, 2009, 2010 and 2011 is derived from our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2011, as amended, and incorporated by reference herein. The unaudited balance sheet data as of March 31, 2012 and unaudited statements of operations data for the three months ended March 31, 2011 and 2012 is derived from our unaudited quarterly financial statements included in our Quarterly Report on Form 10-Q for the three months ended March 31, 2012 and incorporated by reference herein. These unaudited financial statements have been prepared on a basis consistent with our audited financial statements and include, in the opinion of management, all adjustments, consisting only of normal recurring adjustments, necessary for the fair statement of the financial information in those statements.

On September 22, 2010, we acquired Agri-Energy, a Minnesota limited liability company, engaged in the business of producing and selling ethanol and related products at the Agri-Energy Facility in Luverne, Minnesota. Following our acquisition of Agri-Energy, we began recording revenue from the sale of ethanol and related products. The Agri-Energy Facility continued to produce and sell ethanol and related products throughout our retrofit of the facility until May 2012, when we commenced start-up operations for the production of isobutanol at the facility. We plan to commence commercial production of isobutanol at the Agri-Energy Facility by June 30, 2012. However, technical completion of the retrofit and the initial shipments of isobutanol from the Agri-Energy Facility are not expected until the third quarter of 2012. Because the production of ethanol is not our intended business, we have and will continue to report as a development stage company until we begin to generate revenue from the sale of isobutanol or other products that are or will become our intended business. 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 or Gevo once commercial isobutanol production commences at this facility. For purposes of the disclosure contained in this section, the company, we, us and our refer to Gevo, Inc. and Gevo Development, LLC 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:	Years Ended December 31, 2009	2010(1)	2011	Three Months Ended March 31, 2011	2012
Revenues:					
Ethanol sales and related products, net	$	$ 14,765,000	$ 63,742,000	$ 15,109,000	$ 14,258,000
Grant and research and development program revenue	660,000	1,493,000	807,000	172,000	614,000
Licensing revenue		138,000			
Total revenues	660,000	16,396,000	64,549,000	15,281,000	14,872,000
Cost of goods sold		(13,446,000)	(60,588,000)	(15,193,000)	(15,010,000)
Gross margin (loss)	660,000	2,950,000	3,961,000	88,000	(138,000)
Operating expenses:					
Research and development	(10,508,000)	(14,820,000)	(19,753,000)	(3,266,000)	(4,955,000)
Selling, general and administrative	(8,699,000)	(23,643,000)	(28,890,000)	(5,234,000)	(13,127,000)
Other operating expenses	(22,000)		(11,000)		
Total operating expenses	(19,229,000)	(38,463,000)	(48,654,000)	(8,500,000)	(18,082,000)
Loss from operations	(18,569,000)	(35,513,000)	(44,693,000)	(8,412,000)	(18,220,000)
Other (expense) income:					
Interest and other expense	$ (1,103,000)	$ (2,374,000)	$ (3,577,000)	$ (892,000)	$ (1,087,000)
Interest and other income	277,000	108,000	85,000	50,000	
Loss from change in fair value of warrant liabilities(2)	(490,000)	(2,333,000)	(29,000)	(29,000)	
Total other expense	(1,316,000)	(4,599,000)	(3,521,000)	(871,000)	(1,087,000)
Net loss	(19,885,000)	(40,112,000)	(48,214,000)	(9,283,000)	(19,307,000)
Deemed dividend amortization of beneficial conversion feature on Series D-1 convertible preferred stock		(2,778,000)	(1,094,000)	(1,094,000)	
Net loss attributable to Gevo, Inc. common stockholders	$ (19,885,000)	$ (42,890,000)	$ (49,308,000)	$ (10,377,000)	$ (19,307,000)
Net loss per share of common stock attributable to Gevo, Inc. stockholders, basic and diluted	$ (18.07)	$ (37.44)	$ (2.15)	$ (0.76)	$ (0.74)
Weighted-average number of common shares used in computing net loss per share of common stock, basic and diluted	1,100,294	1,145,500	22,909,916	13,744,337	26,186,133

footnotes on following page

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(1) Since Agri-Energy was acquired on September 22, 2010, our consolidated results of operations for the year ended December 31, 2010 include the results of operations of Agri-Energy from September 23, 2010 to the period end date.
(2) On January 1, 2009, we changed the manner in which we account for warrants that were exercisable into preferred stock, as described in our consolidated financial statements.

	As of March 31, 2012		
Consolidated balance sheet data:	**Actual**	**As Adjusted(1)**	**As Further Adjusted(2)**
Cash and cash equivalents	$ 73,622,000	$	$
Total assets	127,975,000		
Secured long-term debt, including current portion, net of debt discounts	32,881,000		
Total liabilities	50,767,000		
Accumulated deficit	(153,942,000)		
Total stockholders equity (deficit)	77,208,000		

(1) The as adjusted consolidated balance sheet data gives effect to this offering and the application of the net proceeds therefrom as set forth under Use of proceeds.
(2) The as further adjusted consolidated balance sheet data gives effect to the concurrent convertible notes offering and the application of the net proceeds therefrom as set forth under Use of proceeds.

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Risk factors

An investment in our common stock involves a substantial risk of loss. You should carefully consider these risk factors, together with all of the other information included or incorporated by reference in this prospectus supplement and the accompanying prospectus, as modified and superseded pursuant to Rule 412 under the Securities Act of 1933, as amended (the Securities Act), before you decide to invest in our common stock. The occurrence of any of the following risks could harm our business. In that case, the trading price of our common stock could decline, and you may lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our operations. You should also refer to the other information contained in this prospectus supplement and the accompanying prospectus or incorporated by reference herein or therein, including our financial statements and the notes to those statements and the information set forth under the heading Cautionary note regarding forward-looking statements.

CERTAIN RISKS RELATING TO OUR COMMON STOCK AND THE CONVERTIBLE NOTES

We will incur significant indebtedness when we sell the convertible notes and we may incur additional indebtedness in the future. The indebtedness created by the sale of the convertible notes and any future indebtedness we incur exposes us to risks that could adversely affect our business, financial condition and results of operations.

Concurrently with this offering of common stock, we are offering $ aggregate principal amount of % convertible notes due 2022. As of March 31, 2012, the aggregate outstanding principal and final payment under our loan from Lighthouse Capital Partners V, L.P. (Lighthouse) was approximately $0.7 million, and the aggregate outstanding principal and final payments under the loans from TriplePoint Capital LLC (TriplePoint) was approximately $34.8 million. As of June 25, 2012, all amounts outstanding under our loan from Lighthouse had been paid in full. We will incur $ million of senior indebtedness when we sell the convertible notes, or $ million of senior indebtedness if the underwriters for the concurrent convertible notes offering exercise in full their option to purchase additional convertible notes. We may also incur additional long-term indebtedness or obtain additional working capital lines of credit to meet future financing needs. Our indebtedness could have significant negative consequences for our business, results of operations and financial condition, including:

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

We cannot assure you that we will continue to maintain sufficient cash reserves or that our business will generate cash flow from operations at levels sufficient to permit us to pay principal, premium, if any, and interest on our indebtedness, or that our cash needs will not increase. If we are unable to generate sufficient cash flow or otherwise obtain funds necessary to make required payments, or if we fail to comply with the various requirements of our existing indebtedness, the convertible notes or any

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indebtedness which we may incur in the future, we would be in default, which would permit the holders of the convertible notes and such other indebtedness to accelerate the maturity of the convertible notes and such other indebtedness and could cause defaults under the convertible notes and such other indebtedness. Any default under the convertible notes or such other indebtedness could have a material adverse effect on our business, results of operations and financial condition.

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

We and any current and future subsidiaries of ours may incur substantial additional debt in the future, subject to the specified limitations in our existing financing documents and the indenture governing the convertible notes. Under the terms of the indenture governing the convertible notes, we will not be restricted from incurring additional debt, securing future debt, recapitalizing our debt or taking a number of other actions that are not limited by the terms of the indenture governing the convertible notes that could have the effect of diminishing our ability to make payments on the convertible notes when due. If new debt is added to our or any of our subsidiaries debt levels, the risks described in this Certain Risks Relating to Our Common Stock and the Convertible Notes section could intensify.

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

The market price of shares of our common stock has experienced significant price and volume fluctuations. For example, since February 19, 2011, when we became a public company, the closing sales price for one share of our common stock has reached a high of $26.36 and a low of $4.84.

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

- Ø actual or anticipated fluctuations in our financial condition and operating results;
- Ø the position of our cash and cash equivalents;
- Ø actual or anticipated changes in our growth rate relative to our competitors;
- Ø actual or anticipated fluctuations in our competitors operating results or changes in their growth rate;
- Ø announcements of technological innovations by us, our partners or our competitors;
- Ø announcements by us, our partners or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- Ø the entry into, modification or termination of licensing arrangements, marketing arrangements, and/or research, development, commercialization, supply, off-take 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;
- litigation involving us, our general industry or both;

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Risk factors

- Ø disputes or other developments related to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- Ø changes in existing laws, regulations and policies applicable to our business and products, including the Renewable Fuel Standard (RFS) program, and the adoption of or failure to adopt carbon emissions regulation;
- Ø announcements or expectations of additional financing efforts;
- Ø sales of our common stock by us or our stockholders;
- Ø share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- Ø general market conditions in our industry; and
- Ø general economic and market conditions, including the recent financial crisis.

Furthermore, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of shares of our common stock, regardless of our operating performance, and cause the value of your investment to decline. In addition, the existence of the convertible notes may encourage short selling in our common stock by market participants because the conversion of the convertible notes could depress the price of our common stock.

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

The price of our common stock also could be affected by possible sales of common stock by investors who view the convertible notes as a more attractive means of equity participation in us and by hedging or arbitrage activity involving our common stock that we expect to develop as a result of the issuance of the convertible notes.

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. Our three largest stockholders as of June 15, 2012 beneficially own, collectively, approximately 46% 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.

In addition, as of June 15, 2012, there were 3,462,295 shares subject to outstanding options that are or will become eligible for sale in the public market to the extent permitted by any applicable vesting requirements and Rules 144 and 701 under the Securities Act. Moreover, certain holders of our outstanding common stock (including shares of our common stock issuable upon the exercise of outstanding warrants) have rights, subject to some conditions, to require us to file registration statements covering their shares and to include their shares in registration

statements that we may file for ourselves or other stockholders.

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Risk factors

We registered 6,751,194 shares of common stock, which are reserved for issuance under our stock incentive plans and our ESPP. These shares can be freely sold in the public market upon issuance and once vested.

We may not have the ability to pay interest on the convertible notes or to repurchase or redeem the convertible notes.

The convertible notes bear interest at a rate of % per year, payable in cash semi-annually in arrears on and of each year, commencing in 2013. If a fundamental change occurs, holders of the convertible notes may require us to repurchase, for cash, all or a portion of their convertible notes. If we elect to redeem the convertible notes prior to their maturity, the redemption price of any convertible notes redeemed by us will be paid for in cash. Our ability to pay the interest on the convertible notes, to repurchase or redeem the convertible notes, to refinance our indebtedness and to fund working capital needs and planned capital expenditures depends on our ability to generate cash flow in the future. To some extent, this is subject to general economic, financial, competitive, legislative and regulatory factors and other factors that are beyond our control. We cannot assure you that we will continue to maintain sufficient cash reserves or that our business will continue to generate cash flow from operations at levels sufficient to permit us to pay the interest on the convertible notes, to repurchase or redeem the convertible notes or to pay cash upon conversion of the convertible notes, or that our cash needs will not increase. In addition, any such repurchase or redemption of the convertible notes, even if such action would be in our best interests, may result in a default under the agreements governing our current indebtedness with TriplePoint unless we are able to obtain TriplePoint s consent prior to the taking of such action.

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

If we are unable to generate sufficient cash flow from operations in the future to service our indebtedness and meet our other needs, we may have to refinance all or a portion of our indebtedness, obtain additional financing, reduce expenditures or sell assets that we deem necessary to our business. We cannot assure you that any of these measures would be possible or that any additional financing could be obtained on favorable terms, or at all. The inability to obtain additional financing on commercially reasonable terms could have a material adverse effect on our financial condition, which could cause the value of your investment to decline.

Future issuances of our common stock or instruments convertible into our common stock, including in connection with conversions of convertible notes, and hedging activities by holders of the convertible notes may materially and adversely affect the price of the common stock and the convertible notes.

Concurrently with this offering of common stock, we are offering $ aggregate principal amount of convertible notes (or a total of $ aggregate principal amount of convertible notes if the underwriters for the concurrent convertible notes offering exercise in full their option to purchase, within 30 days from the date of the initial issuance of the convertible notes, up to an additional $ in principal amount of convertible notes at the offering price less the underwriting discount) pursuant to a separate prospectus supplement. Other than lock-up provisions that apply for the first 90

days after the date of this prospectus supplement, we are not restricted from issuing additional shares of our common stock or other instruments convertible into our common stock. If we issue additional shares of common stock or instruments convertible into common stock, it may materially and adversely affect the price of the common stock. In addition, the conversion of some or all of the convertible notes may dilute the ownership interests of existing stockholders, and any sales in the public market of any of our common stock issuable upon such conversion could adversely affect prevailing market prices of the common stock. Moreover, the anticipated conversion of the convertible notes into shares of our common stock could depress the trading price of our common stock. If a holder of our convertible notes elects to convert some or all of their convertible notes on or after January 1, 2013 and on or prior to July 1, 2017, such holder will be entitled to receive a coupon make-whole payment for the convertible notes being converted. We have the option to issue our common stock to any converting holder in lieu of making the coupon make-whole payment in cash. If we elect to issue our common stock for such payment, then the stock will be valued at 90% of the simple average of the daily volume weighted average prices of our common stock for the 10 trading days ending on and including the trading day immediately preceding the conversion date. Given that the agreements governing our secured indebtedness with TriplePoint prohibit us from paying, repurchasing or redeeming the convertible notes or making cash payments in respect of the coupon make-whole amount upon a conversion, we may be unable to make such payment in cash. If we elect to issue our common stock for such payment, this may cause significant additional dilution to our existing stockholders.

The price of our common stock also could be affected by possible sales of our common stock by investors who view the convertible notes as a more attractive means of equity participation in our company and by hedging or arbitrage trading activity that we expect to develop involving our common stock by holders of the convertible notes.

We have broad discretion in the use of the net proceeds from this offering and the concurrent convertible notes offering, if any, and may not use them effectively, which could cause the value of your investment to decline.

Although we currently intend to use the net proceeds from this offering and the concurrent convertible notes offering, if any, in the manner described in Use of proceeds elsewhere in this prospectus supplement, we will have broad discretion in the application of the net proceeds of this offering and the concurrent convertible notes offering, if any. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering or the concurrent convertible notes offering, if any. 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.

Provisions in the indenture for the convertible notes may deter or prevent a business combination that may be favorable to you.

If a fundamental change occurs prior to the maturity date of the convertible notes, holders of the convertible notes will have the right, at their option, to require us to repurchase all or a portion of their convertible notes. In addition, if a fundamental change occurs prior to the maturity date of the convertible notes, we will in some cases be required to increase the conversion rate for a holder that elects to convert its convertible notes in connection with such fundamental change. In addition, the indenture for the convertible notes prohibits us from engaging in certain mergers or acquisitions unless, among other things, the surviving entity assumes our obligations under the convertible notes. These and other provisions could prevent or deter a third party from acquiring us, even where the acquisition could be beneficial to you.

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Risk factors

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

Provisions in our amended and restated certificate of incorporation and our amended and restated bylaws may delay or prevent an acquisition of us. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws provide for a board of directors that is divided into three classes with staggered three-year terms, provide that all stockholder action must be effected at a duly called meeting of the stockholders and not by a consent in writing, and further provide that only our board of directors may call a special meeting of the stockholders. These provisions may also frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, who are responsible for appointing the members of our management team. Furthermore, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits, with some exceptions, stockholders owning in excess of 15% of our outstanding voting stock from merging or combining with us. Finally, our charter documents establish advance notice requirements for nominations for election to our board of directors and for proposing matters that can be acted upon at stockholder meetings. Although we believe these provisions together provide an opportunity to receive higher bids by requiring potential acquirers to negotiate with our board of directors, they would apply even if an offer to acquire the Company may be considered beneficial by some stockholders.

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

Our officers, directors and existing stockholders who held at least 5% of our common stock as of June 15, 2012 together control approximately 73% of our outstanding common stock, with a single stockholder (Khosla Ventures I, L.P. and its affiliates) controlling approximately 27% of our outstanding common stock. 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 the Company otherwise favored by our other stockholders. This concentration of ownership could depress our stock price.

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

We do not have any control over these analysts. If one or more of the analysts who cover us downgrade our stock or change their opinion of our stock, our stock price would likely decline. If one or more of these analysts cease coverage of the 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.

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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.

Under the terms of our amended and restated Agri-Energy Loan Agreement with TriplePoint, subject to certain limited exceptions, Agri-Energy is only permitted to pay dividends if the following conditions are satisfied: (i) the retrofit of the Agri-Energy Facility is complete and the facility is producing commercial volumes of isobutanol, (ii) its net worth is greater than or equal to $10.0 million, and (iii) no event of default has occurred and is continuing under the agreement. 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 the amended and restated Agri-Energy Loan Agreement. We have never paid cash dividends on our common stock and we do not expect to pay cash dividends on our common stock at any time in the foreseeable future. The future payment of dividends directly depends upon our future earnings, capital requirements, financial requirements and other factors that our board of directors will consider. As a result, only appreciation of the price of our common stock, which may never occur, will provide a return to stockholders. Investors seeking cash dividends should not invest in our common stock.

CERTAIN RISKS RELATING TO OUR BUSINESS AND STRATEGY

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

We have incurred net losses since our inception, including losses of $19.3 million, $48.2 million, $40.1 million and $19.9 million in the three months ended March 31, 2012 and fiscal years ended December 31, 2011, 2010 and 2009, respectively. As of March 31, 2012, we had an accumulated deficit of $153.9 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 significant revenues from the sale of isobutanol. Prior to September 2010, our revenues were primarily derived from government grants and cooperative agreements. From the completion of our acquisition of Agri-Energy in September 2010 until the commencement of our retrofit start-up operations in May 2012, we had generated revenue from the sale of ethanol and related products. Now that we have commenced start-up operations for the production of isobutanol, we do not expect to generate future revenues from the sale of ethanol at the Agri-Energy Facility. If our existing grants and cooperative agreements are canceled prior to the expected end dates or we are unable to obtain new grants and cooperative agreements, 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, 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 our litigation with Butamax Advanced Biofuels LLC (a joint venture between BP p.l.c. (BP) and E.I. du Pont de Nemours and Company, Butamax) may become significant (as described further in our Annual Report on Form 10-K, as amended, and other reports that we have filed with the SEC). As a result, even if our revenues increase substantially, we expect that our expenses will exceed revenues for the foreseeable future. We do not expect to achieve profitability during the foreseeable future, and may never achieve it. If we fail to achieve profitability, or if the time required to achieve profitability is longer than we anticipate, we may not be able to continue our business. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

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Our retrofits of the Agri-Energy and Redfield Facilities will be our first commercial retrofits and, as a result, our production of isobutanol could be delayed or we could experience significant cost overruns in comparison to our current estimates.

In September 2010, we acquired ownership of an ethanol production facility, the Agri-Energy Facility in Luverne, Minnesota, and in June 2011, we acquired access to a second ethanol production facility, the Redfield Facility in Redfield, South Dakota, pursuant to our joint venture with Redfield. We intend to retrofit both facilities to produce isobutanol. Cost overruns or other unexpected difficulties could cause the retrofits to cost more than we anticipate, which could increase our need for such funding. Such funds may not be available when we need them, on terms that are acceptable to us or at all, which could delay our initial commercial production of isobutanol. If additional funding is not available to us, or not available on terms acceptable to us, it could force us to use significantly more of our own funds than planned, limiting our ability to acquire access to or retrofit additional ethanol plants. Such a result could reduce the scope of our business plan and have an adverse effect on our results of operations.

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

The various bioindustrial markets in which we plan to operate are subject to frequent and extensive litigation regarding patents and other intellectual property rights. In addition, many companies in intellectual property-dependent industries, including the renewable energy industry, have employed intellectual property litigation as a means to gain an advantage over their competitors. As a result, we may be required to defend against claims of intellectual property infringement that may be asserted by our competitors against us and, if the outcome of any such litigation is adverse to us, it may affect our ability to compete effectively. Currently, we are defending against three lawsuits filed by Butamax alleging that we have infringed patents for certain recombinant microbial host cells that produce isobutanol and methods for the production of isobutanol using such host cells and a patent covering a modified Pseudomonas KARI enzyme. The litigation with Butamax is dynamic. We have filed complaints alleging infringement of certain of our patents by Butamax and we anticipate that additional patents involving the isobutanol production process that are issued to Butamax, its members or us will be involved in litigation. The trial for the earliest-filed Butamax litigation is currently scheduled for April 2013.

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

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- pay damages, including the possibility of treble damages in a patent case if a court finds us to have willfully infringed certain intellectual property rights.

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

Following completion of its retrofit to isobutanol production, the Agri-Energy Facility will be our first commercial isobutanol production facility, and, as a result, our production of isobutanol could be delayed or we could experience significant cost overruns in comparison to our current estimates of production costs or be unable to produce planned quantities of isobutanol.

In May 2012, we announced that we had commenced start-up operations for the retrofit of the Agri-Energy Facility to isobutanol production. We plan to commence commercial production of isobutanol at the Agri-Energy Facility by June 30, 2012. However, technical completion of the retrofit and the initial shipments of isobutanol from the Agri-Energy Facility are not expected until the third quarter of 2012 and we expect that production volumes during start-up operations will be lower than the projected nameplate capacity for isobutanol production at the facility. We project that the Agri-Energy Facility will be able to produce isobutanol at a run rate of approximately one million gallons per month by the end of 2012 and will reach full production capacity run rates by the end of 2013. However, we may encounter unexpected production challenges during the completion of the retrofit and the projected ramp up in production rates. Any such production challenges may prevent us from producing significant quantities of isobutanol or may significantly increase our cost to produce isobutanol.

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

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

As of the date of this prospectus supplement, 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;

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Ø purification of the isobutanol; and

Ø storage and distribution of the isobutanol.

Our future success depends on our ability to produce commercial quantities of isobutanol in a timely and economic manner. Our biocatalysts have not yet produced commercial volumes of isobutanol. While we have produced isobutanol using our biocatalysts at the demonstration facility and at the Agri-Energy Facility, such production was not at full scale. We have focused the majority of our research and development efforts on producing isobutanol from dextrose and challenges remain in achieving substantial production volumes with other sugars, like corn mash. The risk of contamination and other problems rise as we increase the scale of our isobutanol production. If we are unable to successfully manage these risks, we may encounter difficulties in achieving our target isobutanol production yield, rate, concentration or purity at a commercial scale, which could delay or increase the costs involved in commercializing our isobutanol production. In addition, we have limited experience sourcing 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.

Prior to the Agri-Energy Facility retrofit, which is currently underway, neither we nor ICM had ever built (through retrofit or otherwise) or operated a commercial isobutanol facility. We assume that we understand how the engineering and process characteristics of the one MGPY demonstration facility will scale up to larger facilities, but these assumptions may prove to be incorrect. Accordingly, we cannot be certain that we can manufacture isobutanol in an economical manner in commercial quantities. If our costs to build large-scale commercial isobutanol facilities are significantly higher than we expect or if we fail to 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 additional ethanol production facilities suitable for efficient retrofitting, or acquire access to sufficient capacity to be commercially viable or meet customer demand.

Our strategy currently includes accessing and retrofitting, either independently or with potential development partners, 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 have acquired access to one 50 MGPY ethanol production facility pursuant to our joint venture with Redfield. We plan to acquire additional production capacity to enable us to produce and sell approximately 350 MGPY of isobutanol in 2015. We may not find development partners with whom we can implement this growth strategy, and we may not be able to identify facilities suitable for joint venture, acquisition or lease. Even if we successfully identify a facility suitable for efficient retrofitting, we may not be able to acquire access to such facility in a timely manner, if at all. The owners of the ethanol facility may reach an agreement with another party, refuse to consider a joint venture, acquisition or lease, or demand more or different consideration than we are willing to provide. In particular, if the profitability of ethanol production increases, plant owners may be less likely to consider modifying their production, and thus may be less willing to negotiate with us or agree to allow us to retrofit their facilities for isobutanol production. We may also find that it is necessary to offer special terms, incentives and/or rebates to owners of ethanol facilities that allow us to access and retrofit their

facilities before our production technology has been proven on a commercial scale. Even if the owners of a facility are interested in reaching an agreement that grants us access to the plant, negotiations may take longer or cost more than we expect, and we may never achieve a final agreement. Further, we may not be able to raise capital on acceptable terms, or at all, to finance our joint venture, acquisition, participation or lease of facilities. Even if we are able to access and retrofit several facilities, we may fail to access enough capacity to be commercially viable or meet the volume demands or minimum requirements of our customers, including pursuant to definitive supply or distribution agreements that we may enter into, which may subject us to monetary damages. For example, under the terms of our international off-take and distribution agreement with Sasol, we are required to pay certain shortfall fees if we are not able to supply Sasol with certain minimum quantities of product. Failure to acquire access to sufficient capacity in a timely manner and on favorable terms may slow or stop our commercialization process, which could have a material adverse effect on our business, financial condition and results of operations.

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

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

No two ethanol facilities are exactly alike, and each retrofit will require individualized engineering and design work. There is no guarantee that we or any contractor we retain will be able to successfully design a commercially viable retrofit, or properly complete the retrofit once the engineering plans are completed. Prior to the Agri-Energy Facility retrofit, which is currently underway, neither we nor ICM had ever built, via retrofit or otherwise, a full-scale commercial isobutanol facility. Despite our experience with the retrofit of the Agri-Energy Facility, our estimates of the capital costs that we will need to incur to retrofit a commercial-scale ethanol facility may prove to be inaccurate, and each retrofit may cost materially more to engineer and build than we currently anticipate. For example, our estimates assume that each plant we retrofit will be performing at full production capacity, and we may need to expend substantial sums to repair 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.

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Though our retrofit design for the Agri-Energy Facility 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. In addition, we may be unable to secure the necessary regulatory approvals and permits to switch between isobutanol and ethanol production in a timely manner, or at all. Thus, if we fail to achieve commercial levels of isobutanol production at a retrofitted facility, we may be unable to rely on ethanol production as an alternative 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 and/or to meet the volume demands or minimum requirements of our customers, including pursuant to definitive supply or distribution agreements that we may enter into, which may subject us to monetary damages. For example, under the terms of our international off-take and distribution agreement with Sasol, we are required to pay certain shortfall fees if we are not able to supply Sasol with certain minimum quantities of product. Failure to achieve these rates or meet these minimum requirements, or achieving them only after significant additional expenditures, could substantially harm our commercial performance.

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

Even if we produce isobutanol at our targeted rates, we may be unable to produce isobutanol that meets customer specifications. If we fail to meet specific product or volume specifications contained in a supply agreement, the customer may have the right to seek an alternate supply of isobutanol and/or terminate the agreement completely, and we could be required to pay shortfall fees or otherwise be subject to damages. A failure to successfully meet the specifications of our potential customers could decrease demand, and significantly hinder market adoption of our products.

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

We have very limited experience operating a commercial ethanol facility and no experience operating a commercial isobutanol facility. Accordingly, we may encounter significant difficulties operating at a

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

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

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

While we have succeeded, at the demonstration plant, in reaching our commercial fermentation performance targets for isobutanol concentration, fermentation productivity and isobutanol yield, we have not accomplished this in a commercial plant environment. We are currently optimizing our yeast biocatalyst in anticipation of its integration into commercial facilities, but this process, if it succeeds at all, may take longer or cost more than expected. Our yeast biocatalyst may not be able to meet the commercial performance targets at a commercial-scale retrofitted plant in a timely manner, or ever. In addition, the risk of contamination and other problems may increase at commercial-scale isobutanol production facilities, which could negatively impact our cost of production. If we encounter difficulties in scaling up our production, our commercialization of isobutanol and our business, financial condition and results of operations will be materially adversely affected.

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

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

We also intend to market our isobutanol to chemical producers for use in making various chemicals such as isobutylene, a type of butene that can be produced through the dehydration of isobutanol. Although a significant market currently exists for isobutylene produced from petroleum, which is widely used in the production of plastics, specialty chemicals, alkylate for gasoline blending and high octane aviation fuel,

no one has successfully created isobutylene on a commercial scale from bio-based isobutanol. Therefore, to gain market acceptance and successfully market our isobutanol to chemical producers, we must show that our isobutanol can be converted into isobutylene at a commercial scale. As no company currently dehydrates commercial volumes of isobutanol into isobutylene, we must demonstrate the large-scale feasibility of the process and reach agreements with companies that are willing to invest in the necessary dehydration infrastructure. Failure to reach favorable agreements with these companies, or the inability of their plants to convert isobutanol into isobutylene at sufficient scale, will slow our development in the chemicals market and could significantly affect our profitability.

Obtaining market acceptance in the chemicals industry is complicated by the fact that many potential chemicals industry customers have invested substantial amounts of time and money in developing petroleum-based production channels. These potential customers generally have well-developed manufacturing processes and arrangements with suppliers of chemical components, and may display substantial resistance to changing these processes. Pre-existing contractual commitments, unwillingness to invest in new infrastructure, distrust of new production methods and lengthy relationships with current suppliers may all slow market acceptance of isobutanol.

No market currently exists for isobutanol as a fuel or 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 believe that consumer demand for environmentally sensitive products will drive demand among large brand owners for renewable hydrocarbon sources. One of our marketing strategies is to leverage this demand to obtain commitments from large brand owners to purchase products made from our isobutanol by third parties. We believe these commitments will, in turn, promote chemicals industry demand for our isobutanol. If consumer demand for environmentally sensitive products fails to develop at sufficient scale or if such demand fails to drive large brand owners to seek sources of renewable hydrocarbons, our revenue and growth rate could be materially and adversely affected.

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

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

Before any biofuel we produce receives a renewable identification number (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 (TSCA). The TSCA requires us to comply with the EPA s Microbial Commercial Activity Notice process to operate plants producing isobutanol using our biocatalysts. The TSCA s new chemicals submission policies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of our isobutanol production.

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

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

We are in negotiations, facilitated by the Air Transport Association of America (ATA) with several major passenger and cargo airlines for potential commitments by several ATA member airlines to purchase jet fuel manufactured by third parties from our isobutanol. Jet fuels must meet various statutory and regulatory requirements before they may be used in commercial aviation. In the U.S., the use of specific jet fuels is regulated by the Federal Aviation Administration (FAA). Rather than directly approving specific fuels, the FAA certifies individual aircraft for flight. This certification includes authorization for an aircraft to use the types of fuels specified in its flight manual. To be included in an aircraft s flight manual, the fuel must meet standards set by ASTM. The current ASTM requirements do not permit the use of jet fuel derived from isobutanol, and we will need to give ASTM sufficient data to justify creating a new standard applicable to ATJ. Though our work testing isobutanol-based ATJ with the U.S. Air Force Research Laboratory has provided us with data we believe ASTM will take into consideration, the process of seeking required approvals and the continuing need for compliance with applicable statutes and regulations will require the expenditure of substantial resources. Failure to obtain regulatory approval in a timely manner, or at all, could have a significant negative effect on our operations.

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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, Toray Industries, United Airlines and TOTAL PETROCHEMICALS. However, as of June 15, 2012, we are not party to any final, definitive supply or distribution agreements for our isobutanol, other than our exclusive supply agreement with LANXESS, our international off-take and distribution agreement with Sasol, our commercial off-take agreement with Mansfield, our joint development agreement with Toray Industries and our contract from the DLA. We may be unable to negotiate final terms with other companies in a timely manner, or at all, and there is no guarantee that the terms of any final agreement will be the same or similar to those currently contemplated in our preliminary agreements. Final terms may include less favorable pricing structures or volume commitments, more expensive delivery or purity requirements, reduced contract durations and other adverse changes. Delays in negotiating final contracts could slow our initial isobutanol commercialization, and failure to agree to definitive terms for sales of sufficient volumes of isobutanol could prevent us from growing our business. To the extent that terms in our initial supply and distribution contracts may influence negotiations regarding future contracts, the failure to negotiate favorable final terms related to our current preliminary agreements could have an especially negative impact on our growth and profitability. Additionally, as we have yet to produce or supply commercial volumes of isobutanol to any customer, we have not demonstrated that we can meet the production levels contemplated in our current non-binding supply agreements. If our production scale-up proceeds more slowly than we expect, or if we encounter difficulties in successfully completing plant retrofits, potential customers, including those with whom we have current letters of intent, may be less willing to negotiate definitive supply agreements, or demand terms less favorable to us, and our performance may suffer.

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

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

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 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 fuel 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 fuel 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.

Most of the ethanol plants we initially plan to retrofit use dry-milled corn as a feedstock. We plan to sell, as animal feed, the iDGs left as a co-product of fermenting isobutanol from dry-milled corn. We believe that this will enable us to offset a significant portion of the expense of purchasing corn for fermentation. We are currently approved to sell iDGs into animal feed through a self-assessed GRAS process via third party scientific review. In order to improve the value of our iDGs , we are also in the process of obtaining FDA approval for the marketing of our iDGs . We believe obtaining FDA approval will increase the value of our iDGs by offering customers of our iDGs further assurance of the safety of our iDGs . FDA testing and approval can take a significant amount of time, and there is no guarantee that we will ever receive such approval. If FDA approval is delayed or never obtained, or if we are unable to secure market acceptance for our iDGs , our net cost of production will increase, which may hurt our operating results.

Our development strategy relies heavily on our relationship with ICM.

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

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Because ICM has designed over 50% of the current operating ethanol production capacity in the U.S., we believe that our exclusive alliance with ICM will provide us with a competitive advantage and allow us to more quickly achieve commercial-scale production of isobutanol. However, ICM may fail to fulfill its obligations to us under our agreements and under certain circumstances, such as a breach of confidentiality by us, can terminate the agreements. In addition, ICM may assign the agreements without our consent in connection with a change of control. Since adapting our technology to commercial-scale production of isobutanol and then retrofitting ethanol plants to use our technology is a major part of our commercialization strategy, losing our exclusive alliance with ICM would slow our technological and commercial development. It could also force us to find a new contractor with less experience than ICM in designing and building ethanol plants, or to invest the time and resources necessary to retrofit plants on our own. Such retrofits may be less successful than if performed by ICM engineers, and retrofitted plants might operate less efficiently than expected. This could substantially hinder our ability to expand our production capacity, and could severely impact our performance. If ICM fails to fulfill its obligations to us under our agreements and our competitors obtain access to ICM s expertise, our ability to realize continued development and commercial benefits from our alliance could be affected. Accordingly, if we lose our exclusive alliance with ICM, if ICM terminates or breaches its agreements with us, or if ICM assigns its agreements with us to a competitor of ours or to a third party that is not willing to work with us on the same terms or commit the same resources, our business and prospects could be harmed.

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

Since our inception, most of our resources have been dedicated to research and development, as well as demonstrating the effectiveness of our technology. We believe that we will continue to expend substantial resources for the foreseeable future on further developing our technologies, developing future markets for our isobutanol and accessing 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 equity offerings, including our initial public offering in February 2011, and borrowings under our secured debt financing arrangements. Based on our current plans and expectations, we will require additional funding to achieve our goal of producing and selling approximately 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 against claims by others that we may be violating their intellectual property rights, including the current litigation with Butamax, may be significant. Moreover, our plans and expectations may change as a result of factors currently unknown to us, and we may need additional funds sooner than planned. 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:

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

- Ø the timing of, and costs involved in accessing existing ethanol plants;

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- the timing of, and costs involved in retrofitting the plants we access with our technologies;
- the costs involved in establishing an enhanced yeast seed train;
- the cost of operating, maintaining and increasing production capacity of the retrofitted plants;
- our ability to negotiate agreements supplying suitable biomass to our plants, and the timing and terms of those agreements;
- the timing of, and the costs involved in developing adequate storage facilities for the isobutanol we produce;
- our ability to gain market acceptance for isobutanol as a specialty chemical, gasoline blendstock and as a raw material for the production of hydrocarbons;
- our ability to negotiate supply agreements for the isobutanol we produce, and the timing and terms of those agreements;
- 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 iDGs left as a co-product of fermenting isobutanol from corn as animal feedstock;
- our ability to establish and maintain strategic partnerships, licensing or other arrangements and the timing and terms of those arrangements; and
- the cost of preparing, filing, prosecuting, maintaining, defending and enforcing patent, trademark and other intellectual property claims, including litigation costs and the outcome of such litigation.

Additional funds may not be available when we need them, on terms that are acceptable to us, or at all. If needed funds are not available to us on a timely basis, we may be required to delay, limit, reduce or terminate:

- our research and development activities;
- our plans to access and/or retrofit existing ethanol facilities;

- our production of isobutanol at retrofitted plants; and/or

- our activities in developing storage capacity and negotiating supply agreements that may be necessary for the commercialization of our isobutanol production.

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

We are seeking to raise additional equity capital through the offering contemplated by this prospectus and through the concurrent convertible notes offering and 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 of such securities may include liquidation or other preferences that adversely affect your rights as a stockholder. If we raise capital through debt financing, it may involve agreements that include covenants limiting or restricting our ability to take certain actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through strategic partnerships or

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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 in our Annual Report on Form 10-K, as amended, and other reports that we have filed with the SEC. Accordingly, the results of any prior quarterly or annual periods should not be relied upon as indications of our future operating performance.

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

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

The price and availability of corn and other plant feedstocks may be influenced by general economic, market and regulatory factors. These factors include weather conditions, farming decisions, government policies and subsidies with respect to agriculture and international trade, and global demand and supply. The significance and relative impact of these factors on the price of plant feedstocks is difficult to predict, especially without knowing what types of plant feedstock materials we may need to use.

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

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

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

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

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

From September 2010 through May 2012, we sold distiller s grains as a co-product from the production of ethanol at the Agri-Energy Facility in Luverne, Minnesota and we may sell distiller s grains produced by other ethanol facilities that we acquire in the future. We also plan to sell the iDGs that will be produced as a co-product of our commercial isobutanol production. Distiller s grains and iDGs compete with other animal feed products, and decreases in the prices of these other products could decrease the demand for and price of distiller s grains and iDGs . Additionally, we have not yet produced commercial iDGs and, as such, there is a risk that our iDGs may not meet market requirements. If the price of distiller s grains and iDGs decreases or our iDGs do not meet market requirements, our revenue from the sale of distiller s grains and iDGs could suffer, which could have a material adverse effect on our financial condition.

To the extent that we produce ethanol at accessed plants before commencing isobutanol production, we will be vulnerable to fluctuations in the price of and cost to produce ethanol.

We believe that, like the Agri-Energy Facility, the other ethanol production facilities we access will continue to produce ethanol during most of the retrofit process. In most cases, 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 U.S. Congress passed an alternative fuels mandate that required nearly 14 billion gallons of liquid transportation fuels sold in 2011 to come from alternative sources, including biofuels, a mandate that grows to 36 billion gallons by 2022. Of this amount, a minimum of 21 billion gallons must be advanced biofuels. In the U.S. and in a number of other countries, these regulations and policies have been modified in the past and may be modified again in the future. Any reduction in mandated requirements for fuel alternatives and additives to gasoline may cause 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 that we retrofit, our isobutanol plants will emit greenhouse gases. Any changes in state or federal emissions regulations, including the passage of cap-and-trade legislation or a carbon tax, could limit our production of isobutanol and iDGs and increase our operating costs, which could have a material adverse effect on our business, financial condition and results of operations.

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

If appropriate opportunities become available, we expect to acquire businesses, assets, technologies or products to enhance our business in the future. In connection with any future acquisitions, we could:

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

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

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

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

Realizing the anticipated benefits of joint ventures, including projected increases to production capacity and additional revenue opportunities, involves a number of potential challenges. The failure to meet these challenges could seriously harm our financial condition and results of operations. Joint ventures are

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complex and time-consuming and we may encounter unexpected difficulties or incur unexpected costs related to such arrangements, including:

- difficulties negotiating joint venture agreements with favorable terms and establishing relevant performance metrics;
- difficulties completing the retrofits of the accessed facilities using our integrated fermentation technology;
- the inability to meet applicable performance targets related to the production of isobutanol;
- difficulties obtaining the permits and approvals required to produce and sell our products in different geographic areas;
- complexities associated with managing the geographic separation of accessed facilities;
- diversion of management attention from ongoing business concerns to matters related to the joint ventures;
- difficulties maintaining effective relationships with personnel from different corporate cultures; and
- the inability to generate sufficient revenue to offset retrofit costs.

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

Our joint venture partners may have significant amounts of existing debt and may not be able to service their existing debt obligations, which could cause the failure of a specific project and the loss by us of any investment we have made to retrofit the facilities owned by the joint venture partner. In addition, if we are unable to meet specified performance targets related to the production of isobutanol at a facility owned by one of our joint venture partners, we may never become eligible to receive a portion of the profits of the joint venture and may be unable to recover the costs of retrofitting the facility.

Additionally, we plan to be the sole marketer for all isobutanol and co-products produced using our proprietary technology including, without limitation, all isobutanol that is produced by any facilities that we access via joint venture. Marketing agreements can be very complex and the obligations that we assume as the sole marketer of isobutanol may be time consuming. We have no experience marketing isobutanol on a commercial scale and we may fail to successfully negotiate marketing agreements in a timely manner or on favorable terms. If we fail to successfully market the isobutanol produced using our proprietary technology to refiners and chemical producers, our business, financial condition and results of operations will be materially adversely affected.

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

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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 U.S. and other countries. We have adopted a strategy of seeking patent protection in the U.S. and in certain foreign countries with respect to certain of the technologies used in or relating to our products and processes. As such, as of June 22, 2012, we exclusively licensed rights to 101 issued patents and filed patent applications in the U.S. and in various foreign jurisdictions, and we owned rights to approximately 325 issued patents and filed patent applications in the U.S. and in various foreign jurisdictions. When and if issued, patents would expire at the end of their term and any patent would only provide us commercial advantage for a limited period of time, if at all. Our patent applications are directed to our enabling technologies and to our methods and products which support our business in the advanced biofuels and renewable chemicals markets. We intend to continue to apply for patents relating to our technologies, methods and products as we deem appropriate.

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

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

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

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

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

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

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

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

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

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

We may also be subject to audits by government agencies as part of routine audits of our activities funded by our government grants. As part of an audit, these agencies may review our performance, cost structures and compliance with applicable laws, regulations and standards. Funds available under grants

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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 U.S. government agencies, which could negatively affect our intellectual property rights.

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

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

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

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.

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

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

We 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. Academic and government institutions may also develop technologies, which will compete with us in the chemicals, solvents and blendstock markets.

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

In the production of isobutanol, we face competition from DuPont, which has announced plans to develop and market isobutanol through Butamax, a joint venture with BP. Additionally, 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.

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

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develop technologies that prove more effective than our isobutanol production technology, or such companies may be more adept at marketing their production. Additionally, one small company in France, Global Bioenergies, S.A., is pursuing the production of isobutylene from renewable carbohydrates directly. Since conversion of isobutanol to butenes such as isobutylene is a key step in producing many 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 gasoline blendstock market, we will compete with renewable ethanol producers (including those working to produce ethanol from cellulosic feedstocks), producers of alkylate from petroleum and producers of other blendstocks, all of whom may reduce our ability to obtain market share or maintain our price levels. For example, Coskata, Inc. is developing a hybrid thermochemical-biocatalytic process to produce ethanol from a variety of feedstocks. If any of these competitors succeed in producing blendstocks more efficiently, in higher volumes or offering superior performance than our isobutanol, our financial performance may suffer. Furthermore, if our competitors have more success marketing their products or reach development or supply agreements with major customers, our competitive position may also be harmed.

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

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

Biofuels companies may also provide substantial competition in the hydrocarbon fuels market. With respect to production of renewable gasoline, biofuels competitors are numerous and include both large established companies and numerous start-ups. For example, Virent Energy Systems, Inc. has developed a process for making gasoline and gasoline blendstocks and Kior, Inc. has developed a technology platform to convert biomass into renewable crude oil. Many other competitors may do so as well. In the jet fuel market, we will face competition from companies such as Synthetic Genomics, Inc., Solazyme, Inc., Sapphire Energy, Inc. and Exxon-Mobil Corporation that are pursuing production of jet fuel from algae-based technology. LS9, Inc. (LS9) 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 Inc. 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 partnerships through which we will sell significant volumes of our isobutanol to partners who will convert it into useful hydrocarbons or use it as a fuel or 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 TriplePoint may restrict our ability to engage in certain transactions.

In August 2010, we entered into two loan and security agreements with TriplePoint, one in which we borrowed $5.0 million and another in which our wholly owned subsidiary, Gevo Development, LLC, borrowed $12.5 million to finance its acquisition of Agri-Energy (the Agri-Energy Loan Agreement), each of which has since been amended. In October 2011, the Agri-Energy Loan Agreement was amended to provide Agri-Energy with additional term loan facilities of up to $15.0 million to pay a portion of the costs, expenses, and other amounts associated with the retrofit of Agri-Energy Facility to produce isobutanol. Pursuant to the terms of these loan and security agreements, we cannot engage in certain actions, including disposing of certain assets, granting or otherwise allowing the imposition of a lien against certain assets, incurring certain kinds of additional indebtedness or acquiring or merging with other entities unless we receive the prior approval of TriplePoint. If TriplePoint does not consent to any of the actions that we desire to take, we could be prohibited from engaging in transactions which could be beneficial to our business and our stockholders or could be forced to pay the outstanding balance of the loan(s) in full. As of March 31, 2012, the aggregate outstanding principal and final payments under the loans from TriplePoint was approximately $34.8 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 riots, civil disturbances, war, terrorist acts, floods, infections in our laboratory or production facilities or those of our contract manufacturers and other events beyond our control. We do not have a detailed disaster recovery plan. In addition, we may not carry sufficient business interruption insurance to compensate us for losses that may occur. Any losses or damages we incur could have a material adverse effect on our cash flows and success as an overall business. Furthermore, ICM may terminate our commercialization agreement if a force majeure event interrupts our operations for a specified period of time.

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

We currently engage in hedging transactions to offset some of the effects of volatility in commodity prices. We expect to engage in similar transactions once we begin commercial isobutanol production. We generally follow a policy of using exchange-traded futures contracts to reduce our net position in 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, iDGs or ethanol. Losses from hedging activities and changes in hedging strategy could have a material adverse effect on our operations.

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

Some of our processes involve the use of genetically engineered organisms or genetic engineering technologies. Additionally, our feedstocks may be grown on land that could be used for food production,

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which subjects our feedstock sources to food versus fuel concerns. If we are not able to overcome the ethical, legal and social concerns relating to genetic engineering or food versus fuel, our products and processes may not be accepted. Any of the risks discussed below could result in increased expenses, delays or other impediments to our programs or the public acceptance and commercialization of products and processes dependent on our technologies or inventions. Our ability to develop and commercialize one or more of our technologies, products, or processes could be limited by the following factors:

- public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and genetically engineered products and processes, which could influence public acceptance of our technologies, products and processes;

- public attitudes regarding, and potential changes to laws governing ownership of genetic material, which could harm our intellectual property rights with respect to our genetic material and discourage others from supporting, developing or commercializing our products, processes and technologies;

- public attitudes and ethical concerns surrounding production of feedstocks on land which could be used to grow food, which could influence public acceptance of our technologies, products and processes;

- governmental reaction to negative publicity concerning genetically engineered organisms, which could result in greater government regulation of genetic research and derivative products; and

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

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

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

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

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

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

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

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

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

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

In general, under Section 382 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an ownership change is subject to limitation on its ability to utilize its pre-change net operating loss carry-forwards, or net operating losses, to offset future taxable income. We may have experienced one or more ownership changes in prior years, and the issuance of shares in connection with our initial public offering may itself have triggered 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 over the next 20 years. We believe that it is more likely than not that these carry-forwards will not result in any material future tax savings.

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

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

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

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

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

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

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Our management has concluded that there are no material weaknesses in our internal controls over financial reporting as of March 31, 2012. However, there can be no assurance that our controls over financial processes and reporting will be effective in the future or that additional material weaknesses or significant deficiencies in our internal controls will not be discovered in the future. If we, or our independent registered public accounting firm, discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market s confidence in our financial statements and harm our stock price. In addition, a delay in compliance with Section 404 could subject us to a variety of administrative sanctions, including SEC action, ineligibility for short form resale registration, the suspension or delisting of our common stock from the stock exchange on which it is listed and the inability of registered broker-dealers to make a market in our common stock, which would further reduce our stock price and could harm our business.

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Cautionary note regarding forward-looking statements

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements may include, but are not limited to, statements relating to the achievement of advances in our technology platform, the success of our retrofit production model, the availability of suitable and cost-competitive feedstocks, our ability to gain market acceptance for our products, the expected cost-competitiveness and relative performance attributes of our isobutanol and the products derived from it, additional competition, the future price and volatility of petroleum and products derived from petroleum and statements regarding our intended uses of the proceeds of the securities offered hereby. In some cases, you can identify forward-looking statements by terminology such as may, will, should, expect, plan, anticipate, believe, estimate, pred continue, the negative of such terms or other comparable terminology.

Forward-looking statements reflect our current views about future events, are based on assumptions, and are subject to known and unknown risks and uncertainties. Many important factors could cause actual results or achievements to differ materially from the results, performance or achievements expressed in or implied by our forward-looking statements, including the factors listed below. Many of the factors that will determine future results, performance or achievements are beyond our ability to control or predict. The following are important factors, among others, that could cause actual results, performance or achievements to differ materially from the results or achievements reflected in our forward-looking statements:

- an inability to successfully commercialize isobutanol and the products derived from it;
- an inability to produce commercial quantities of isobutanol in a timely and economic manner;
- unexpected delays, operational difficulties, cost-overruns or failures in the retrofit process;
- a failure to successfully identify and acquire access to additional facilities suitable for efficient retrofitting;
- a failure to market our isobutanol to potential customers;
- fluctuations in the market price of petroleum;
- fluctuations in the market price of corn and other feedstocks;
- an inability to obtain regulatory approval for the use of our isobutanol in our target markets;

- a failure to adequately protect our intellectual property, or the loss of some of our intellectual property rights through costly litigation or administrative proceedings;

- a failure to transition our preliminary commitments into definitive supply and distribution agreements or to negotiate sufficient long-term supply agreements for our production of isobutanol; and

- general economic conditions and inflation, interest rate movements and access to capital.

The forward-looking statements contained herein reflect our views and assumptions only as of the date such forward-looking statements are made. You should not place undue reliance on forward-looking

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Cautionary note regarding forward-looking statements

statements. Except as required by law, we assume no responsibility for updating any forward-looking statements nor do we intend to do so. Our actual results, performance or achievements could differ materially from the results expressed in, or implied by, these forward-looking statements. The risks included in this section are not exhaustive. Additional factors that could cause actual results to differ materially from those described in the forward-looking statements are set forth in the section entitled Risk factors beginning on page S-17.

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Use of proceeds

We expect the net proceeds from this offering to be approximately $ million (or $ million if the underwriters exercise in full their option to purchase additional shares), after deducting underwriting discounts and commissions, as described in Underwriting, and estimated offering expenses payable by us. In addition, we estimate that the net proceeds from the concurrent convertible notes offering, after deducting estimated underwriting discounts and commissions and offering expenses, will be approximately $ million (or approximately $ million if the underwriters for the concurrent convertible notes offering exercise in full their option to purchase additional convertible notes). However, this offering is not contingent upon the concurrent convertible notes offering and we cannot assure you that we will complete the concurrent convertible notes offering.

We currently intend to use all or a portion of the net proceeds of this offering and the concurrent convertible notes offering, if any, together with existing cash and cash equivalents, to complete the retrofit of the Agri-Energy Facility that we acquired in September 2010. A portion of the net proceeds of this offering and the concurrent convertible notes offering, if any, may be used for detailed design work in preparation for the retrofit of the Redfield Facility to isobutanol production pursuant to the joint venture agreement that we entered into in June 2011. We may also use a portion of the net proceeds of this offering and the concurrent convertible notes offering, if any, to fund working capital and other general corporate purposes, which may include paying down certain of our long-term debt obligations and expenses associated with litigation.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses of the proceeds from this offering and the concurrent convertible notes offering, if any. Accordingly, we will retain broad discretion over the use of such proceeds. Pending the use of the net proceeds from this offering and the concurrent convertible notes offering, if any, as described above, we intend to invest the net proceeds in demand deposit accounts or short-term, investment-grade securities.

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Capitalization

The following table sets forth our cash and cash equivalents and capitalization as of March 31, 2012:

Ø on an actual basis;

Ø as adjusted to give effect to the receipt of estimated net proceeds of $ from this offering at an assumed offering price of $ per share, the last reported sales price of our common stock on the NASDAQ Global Market on , 2012, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and the application of the net proceeds therefrom as described under the heading Use of proceeds ; and

Ø as further adjusted to give effect to the issuance and sale of $ aggregate principal amount of % convertible notes due 2022 in the concurrent convertible notes offering, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and the application of the net proceeds therefrom as described under the heading Use of proceeds.

The following table should be read in conjunction with our consolidated financial statements and related notes, which are incorporated by reference into this prospectus supplement.

	Actual	As Adjusted	As Further Adjusted
Cash and cash equivalents	$ 73,622,000	$	$
Debt:			
Secured debt, including current portion	$ 32,881,000	$	$
% convertible senior notes due 2022	$	$	$
Total debt	$ 32,881,000	$	$
Stockholders equity:			
Preferred Stock, $0.01 par value per share; 5,000,000 shares authorized; no shares issued and outstanding, actual; no shares issued and outstanding, as adjusted			
Common stock, $0.01 par value per share; 100,000,000 shares authorized; 26,758,924 shares issued and outstanding, actual; 100,000,000 shares authorized; shares issued and outstanding, as adjusted	$ 267,000	$	$
Additional paid-in capital	$ 230,883,000	$	$
Deficit accumulated during development stage	$ (153,942,000)	$	$
Total stockholders equity	$ 77,208,000	$	$
Total capitalization	$ 183,711,000	$	$

The number of shares of our common stock to be outstanding immediately after the closing of this offering is based on 26,789,598 shares of common stock outstanding as of June 15, 2012 and excludes, as of that date:

- 3,462,295 shares of common stock issuable upon the exercise of outstanding stock options at a weighted average exercise price of $5.90 per share;

- 1,229,998 shares of common stock issuable upon the exercise of outstanding common stock warrants at a weighted average price of $4.60 per share;

- 1,089,706 shares of common stock available for future grant under the 2010 Plan;

- 1,276,879 shares of common stock available for issuance pursuant to our ESPP; and

- shares of common stock issuable upon the conversion of the convertible notes offered in the concurrent convertible notes offering.

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Dilution

Our net tangible book value on March 31, 2012 was approximately $76.262 million, or approximately $2.85 per share of common stock. Net tangible book value per share is determined by dividing our net tangible book value, which consists of tangible assets less total liabilities, by the number of shares of common stock outstanding. Without taking into account any other changes in the net tangible book value after March 31, 2012, other than to give effect to our receipt of the estimated net proceeds from the sale of shares of our common stock at an offering price of $ per share, less the underwriting fees and our estimated offering expenses, our pro forma net tangible book value as of March 31, 2012 would have been approximately $ million, or $ per share. This represents an immediate increase in the net tangible book value of $ per share to existing stockholders and an immediate dilution of $ per share to new investors in the offering. The following table illustrates this per share dilution:

Offering price per share of common stock		$
Net tangible book value per share as of March 31, 2012	$ 2.85	
Increase in net tangible book value per share attributable to the offering	$	
Pro forma net tangible book value per share as of March 31, 2012, after giving effect to the offering		$
Dilution per share to new investors in the offering		$

We established the price for the sale of shares in this offering following negotiations with the underwriters based on an agreed discount of approximately to the prevailing market price of our common stock.

The information above assumes that the underwriters do not exercise their option to purchase additional shares. If the underwriters exercise in full their option to purchase additional shares, our pro forma net tangible book value per share at March 31, 2012, after giving effect to this offering, would have been $ per share, and the dilution in pro forma net tangible book value per share to investors in this offering would have been $ per share.

The above table is based on 26,789,598 shares of common stock outstanding as of June 15, 2012 and excludes, as of that date:

- 3,462,295 shares of common stock issuable upon the exercise of outstanding stock options at a weighted average exercise price of $5.90 per share;
- 1,229,998 shares of common stock issuable upon the exercise of outstanding common stock warrants at a weighted average price of $4.60 per share;
- 1,089,706 shares of common stock available for future grant under the 2010 Plan;
- 1,276,879 shares of common stock available for issuance pursuant to our ESPP; and

Ø shares of common stock issuable upon the conversion of the convertible notes offered in the concurrent convertible notes offering.

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Dilution

To the extent that any of these options are exercised, new options or restricted stock are issued under our equity incentive plans or we issue additional shares of common stock, including upon the exercise of convertible notes, in the future or assume outstanding options in connection with future acquisitions, there will be further dilution to new investors.

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Material United States federal income tax considerations for non-U.S. holders

The following is a summary of the material U.S. federal income tax considerations relevant to the purchase, ownership and disposition of our common stock by a non-U.S. holder (as defined below) as of the date hereof. This summary deals only with non-U.S. holders that acquire our common stock in this offering and hold the common stock as a capital asset.

For purposes of this summary, a non-U.S. holder means a beneficial owner of our common stock that is not a partnership (or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) and is not any of the following for U.S. federal income tax purposes: (i) an individual citizen or resident of the United States, (ii) a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia, (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source, or (iv) a trust if (1) its administration is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all of its substantial decisions or (2) it has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

This summary is based upon provisions of the Internal Revenue Code of 1986, as amended, and regulations, rulings and judicial decisions as of the date hereof. Those authorities may be changed, perhaps retroactively, or be subject to differing interpretations, so as to result in U.S. federal tax considerations different from those summarized below. This summary does not represent a detailed description of the U.S. federal tax considerations to you in light of your particular circumstances. In addition, it does not address the U.S. federal tax considerations to you if you are subject to special treatment under the U.S. federal tax laws (including if you are a bank or other financial institution, insurance company, broker or dealer in securities, tax-exempt organization, foreign government or agency, U.S. expatriate, controlled foreign corporation, passive foreign investment company, or a person who holds our common stock in a straddle or as part of a hedging, conversion or constructive sale transaction). This summary does not address any U.S. taxes other than U.S. federal income taxes. We cannot assure you that a change in law will not alter significantly the tax considerations that we describe in this summary.

If an entity classified as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. If you are a partnership holding our common stock, or a partner in such a partnership, you should consult your tax advisors.

If you are considering the purchase of our common stock, you should consult your own tax advisors concerning the particular U.S. federal tax consequences to you of the purchase, ownership and disposition of the common stock, as well as the consequences to you arising under the laws of any other taxing jurisdiction, including any state, local or foreign tax consequences.

DIVIDENDS

We have never declared or paid any cash dividends on our common stock and do not anticipate paying any cash dividends on our common stock in the foreseeable future. If we were to pay cash dividends in

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Material United States federal income tax considerations for non-U.S. holders

the future on our common stock, they would be subject to U.S. federal income tax in the manner described below.

Cash distributions on our common stock generally will constitute dividends for U.S. federal income tax purposes to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Distributions in excess of current and accumulated earnings and profits will be applied against and reduce a non-U.S. holder s tax basis in our common stock, to the extent thereof, and any excess will be treated as capital gain realized on the sale or other disposition of the common stock and subject to tax in the manner described below under the heading Gain on Disposition of Common Stock.

Distributions paid to a non-U.S. holder of our common stock that constitute dividends under the rules described above generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. However, dividends that are effectively connected with the conduct of a trade or business by a non-U.S. holder within the United States and, where an income tax treaty applies, are attributable to a U.S. permanent establishment of the non-U.S. holder, are not subject to this withholding tax, but instead are subject to U.S. federal income tax on a net income basis at applicable individual or corporate rates. Certain certification and disclosure requirements must be complied with in order for effectively connected dividends to be exempt from this withholding tax. Any such effectively connected dividends received by a foreign corporation may be subject to an additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty.

A non-U.S. holder of our common stock who is entitled to and wishes to claim the benefits of an applicable treaty rate (and avoid backup withholding as discussed below) with respect to dividends received on our common stock, generally will be required to (i) complete an Internal Revenue Service (IRS) Form W-8BEN (or an acceptable substitute form) and make certain certifications, under penalty of perjury, to establish its status as a non-U.S. person and its entitlement to treaty benefits or (ii) if the common stock is held through certain foreign intermediaries, satisfy the relevant certification requirements of applicable U.S. Treasury regulations. Special certification and other requirements apply to certain non-U.S. holders that are entities rather than individuals.

A non-U.S. holder of our common stock eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

GAIN ON DISPOSITION OF COMMON STOCK

A non-U.S. holder generally will not be subject to U.S. federal income tax with respect to gain recognized on a sale or other disposition of our common stock unless (i) the gain is effectively connected with a trade or business of the non-U.S. holder in the United States and, where a tax treaty applies, is attributable to a U.S. permanent establishment of the non-U.S. holder (in which case, for a non-U.S. holder that is a foreign corporation, the branch profits tax described above may also apply), (ii) in the case of a non-U.S. holder who is an individual, such holder is present in the U.S. for 183 or more days in the taxable year of the sale or other disposition and certain other conditions are met, or (iii) subject to certain exceptions, we are or have been a U.S. real property holding corporation for U.S. federal income tax purposes.

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Material United States federal income tax considerations for non-U.S. holders

We believe we currently are not, and do not anticipate becoming, a U.S. real property holding corporation for U.S. federal income tax purposes.

INFORMATION REPORTING AND BACKUP WITHHOLDING

We must report annually to the IRS and to each non-U.S. holder the amount of dividends paid to such holder and the tax withheld (if any) with respect to such dividends, regardless of whether withholding was required. Copies of the information returns reporting such dividends and any withholding may also be made available to the tax authorities in the country in which the non-U.S. holder resides under the provisions of an applicable income tax treaty or information sharing agreement. In addition, dividends paid to a non-U.S. holder may be subject to backup withholding unless applicable certification requirements are met.

Payment of the proceeds of a sale of our common stock within the United States or conducted through certain U.S. related financial intermediaries is subject to information reporting and, depending upon the circumstances, backup withholding unless the non-U.S. holder certifies under penalties of perjury that it is not a United States person (and the payor does not have actual knowledge or reason to know that the holder is a United States person) or the holder otherwise establishes an exemption.

Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against such holder s U.S. federal income tax liability provided the required information is timely furnished to the IRS.

LEGISLATION AFFECTING TAXATION OF COMMON STOCK HELD BY OR THROUGH FOREIGN ENTITIES

Recent legislation may impose a withholding tax on certain payments to foreign entities. The legislation generally would impose a 30% withholding tax on dividends on, or gross proceeds from the sale or other disposition of, our common stock paid to (i) a foreign financial institution unless such institution enters into an agreement with the U.S. Treasury to among other things, undertake to identify accounts held by certain U.S. persons or U.S.-owned foreign entities, annually report certain information about such accounts, and withhold 30% on payments to account holders whose actions prevent it from complying with these reporting and other requirements and (ii) a non-financial foreign entity unless such entity provides the withholding agent with a certification that it does not have any substantial U.S. owners or a certification identifying the direct and indirect substantial U.S. owners of the entity. Under recently issued IRS guidance, these rules generally would only apply to payments of dividends made after December 31, 2013, and payments of gross proceeds from the disposition of stock made after December 31, 2014. Under certain circumstances, a holder may be eligible for refunds or credits of such withholding taxes. Investors are urged to consult with their own tax advisors regarding the possible application of these rules to their investment in our common stock.

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Underwriting

We are offering the shares of our common stock described in this prospectus supplement and the accompanying prospectus through the underwriters named below. UBS Securities LLC and Piper Jaffray & Co. are acting as joint book-running managers of this offering and as the representatives of the underwriters. Robert W. Baird & Co. Incorporated is acting as a co-manager of this offering. We have entered into an underwriting agreement with the underwriters. Each of the underwriters has severally agreed to purchase the number of shares of common stock listed next to its name in the following table.

Underwriters	Number of Shares
UBS Securities LLC	$
Piper Jaffray & Co..	$
Robert W. Baird & Co. Incorporated	$
Total	$

The underwriting agreement provides that the underwriters must buy all of the shares if they buy any of them. However, the underwriters are not required to take or pay for the shares covered by the underwriters over-allotment option described below.

Our common stock is offered subject to a number of conditions, including:

Ø receipt and acceptance of our common stock by the underwriters; and

Ø the underwriters right to reject orders in whole or in part.

In connection with this offering, the underwriters or securities dealers may distribute prospectuses electronically.

Concurrently with this offering of common stock, we are offering $ aggregate principal amount of convertible notes. The underwriters of this offering are also acting as the underwriters of the concurrent convertible notes offering. The closing of this common stock offering and the closing of the concurrent convertible notes offering are not conditioned on each other.

OVER-ALLOTMENT OPTION

We have granted the underwriters an option to buy up to an aggregate of additional shares of our common stock. UBS Securities LLC may exercise this option on behalf of the several underwriters solely for the purpose of covering over-allotments, if any, made in connection with this offering. UBS Securities LLC has 30 days from the date of this prospectus supplement to exercise this option.

COMMISSIONS AND DISCOUNTS

Shares sold by the underwriters to the public will initially be offered at the public offering price set forth on the