

Gevo, Inc.  
Form S-1/A  
November 04, 2010  
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As filed with the Securities and Exchange Commission on November 4, 2010

Registration No. 333-168792

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**Amendment No. 3 to**  
**FORM S-1**  
**REGISTRATION STATEMENT**

*UNDER*

*THE SECURITIES ACT OF 1933*

**GEVO, INC.**

(Exact name of Registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**8731**  
(Primary Standard Industrial  
Classification Code Number)

**87-0747704**  
(I.R.S. Employer  
Identification Number)

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

(303) 858-8358

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

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**Chief Executive Officer**

**Gevo, Inc.**

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**Approximate date of commencement of proposed sale to the public:**

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

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

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

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

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

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

Large accelerated filer "

Accelerated filer "

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

Smaller reporting company "

### CALCULATION OF REGISTRATION FEE

<b>Title of Each Class of Securities to be Registered</b>	<b>Proposed Maximum Aggregate Offering Price(1)</b>	<b>Amount of Registration Fee(2)</b>
Common Stock, \$0.01 par value	\$150,000,000	\$10,695

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

(2) Previously paid.

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

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

PRELIMINARY PROSPECTUS  
**Shares**

Subject to Completion

November 4, 2010

**Common Stock**

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

We have applied to list our common stock on The Nasdaq Global Market, under the symbol GEVO.

**Investing in our common stock involves a high degree of risk. Before buying any shares, you should carefully read the discussion of material risks of investing in our common stock in Risk factors beginning on page 15 of this prospectus.**

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

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

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

The underwriters are offering the common stock as set forth under Underwriting. Delivery of the shares will be made on or about 2010.

**UBS Investment Bank**

**Goldman, Sachs & Co.**

# **Piper Jaffray**

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

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## Conventions that apply to this prospectus

Unless the context otherwise requires, in this prospectus:

Ø the company, we, us and our refer to Gevo, Inc. and its subsidiaries, as the context requires;

Ø MGPY refers to million gallons per year;

Ø BGPY refers to billion gallons per year;

Ø SRI refers to SRI Consulting, a division of Access Intelligence, LLC;

Ø CMAI refers to Chemical Market Associates, Inc.;

Ø EIA refers to the US Energy Information Association;

Ø IEA refers to the International Energy Agency;

Ø RFA refers to the Renewable Fuels Association;

Ø Nexant refers to Nexant, Inc.; and

Ø CDTECH refers to Catalytic Distillation Technologies.

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

With respect to calculation of product market volumes:

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- ∅ product market volumes are provided solely to show the magnitude of the potential markets for isobutanol and the products derived from it. They are not intended to be projections of our actual isobutanol production or sales;
  
- ∅ product market volume calculations are based on data available for the year 2007 (the most current data available from SRI); and
  
- ∅ volume data with respect to target market sizes is derived from data included in various industry publications, surveys and forecasts generated by SRI, CMAI, the EIA, the IEA and Nexant. We have converted these sizes into volumes of isobutanol as follows:
  - i we calculate the size of the market for isobutanol as a gasoline blendstock and oxygenate by multiplying the world gasoline market volume by an estimated 12.5% by volume isobutanol blend ratio;
  
  - i we calculate the size of the specialty chemicals markets by substituting volumes of isobutanol equivalent to the volume of products currently used to serve these markets;
  
  - i we calculate the size of the petrochemicals and hydrocarbon fuels markets by calculating the amount of isobutanol that, if converted into the target products at theoretical yield, would be needed to fully serve these markets (in substitution for the volume of products currently used to serve these markets); and
  
  - i for consistency in measurement, where necessary we convert all market sizes into gallons. Conversion into gallons for the fuels markets is based upon fuel densities identified by Air BP Ltd. and the American Petroleum Institute.

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## Prospectus summary

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

### **BUSINESS OVERVIEW**

#### **Our company**

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

We also believe that the raw materials produced from our isobutanol will be drop-in products, which means that customers will be able to replace petroleum-derived raw materials with isobutanol-derived raw materials without modification to their equipment or production processes. In addition, the final products produced from our isobutanol-based raw materials will be chemically identical to those produced from petroleum-based raw materials, except that they will contain carbon from renewable sources. We believe that at every step of the value chain, renewable products that are chemically identical to incumbent petrochemical products will have lower market adoption hurdles, as the infrastructure and applications for such products already exist.

In order to produce and sell isobutanol made from renewable sources, we have developed the Gevo Integrated Fermentation Technology<sup>®</sup>, or GIFT, an integrated technology platform for the efficient production and separation of isobutanol. GIFT consists of two components, proprietary biocatalysts which convert sugars derived from multiple renewable feedstocks into isobutanol through fermentation, and a proprietary separation unit which is designed to continuously separate isobutanol from water during the fermentation process. We developed our technology platform to be compatible with the existing approximately 20 BGPY of global operating ethanol production capacity, as estimated by the RFA. GIFT is designed to allow relatively low capital expenditure retrofits of existing ethanol facilities,

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enabling a rapid and cost-efficient route to isobutanol production from the fermentation of renewable feedstocks. While we are a development stage company that has generated minimal revenue and has experienced net losses since inception, we believe that our cost-efficient production route will enable rapid deployment of our technology platform and allow our isobutanol and the products produced from it to be economically competitive with many of the petroleum-derived products used in the chemicals and fuels markets today.

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

### **Our markets**

Relative to petroleum-based products, we expect that chemicals and fuels made from our isobutanol will provide our potential customers with the advantages of lower cost volatility and increased supply options for their raw materials. Our isobutanol, and the products produced from it will also offer our potential customers the additional benefit of being able to market their products as environmentally sensitive.

Our initial commercialization efforts are focused on the following markets:

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

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

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

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

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

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

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

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**Our commercialization plan**

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

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

Ø **LANXESS Inc.**, a leading chemicals company;

Ø **TOTAL PETROCHEMICALS USA, INC.**, an affiliate of TOTAL S.A., a major oil and gas integrated company;

Ø **Toray Industries, Inc.**, a leader in the development of fibers, plastics and chemicals;

Ø **United Air Lines, Inc.**, a major commercial airline; and

Ø **CDTECH**, a leading hydrocarbon technology provider for the petrochemical and refining industry.

In addition, we are in discussions with major refiners that have indicated an interest in forming partnerships with us to manufacture renewable jet fuel using our isobutanol. We are also actively pursuing commercial relationships with petrochemical companies and large brand owners regarding the use of our isobutanol in the production of biobased plastics. We believe that these relationships will contribute to the development of chemical and fuel market applications of our isobutanol. However, there can be no assurance that we will be able to enter into definitive supply agreements with the potential customers discussed above, or attract customers based on our arrangements with the petrochemical companies and large brand owners discussed above.

We are currently in discussions with several ethanol plant owners that have expressed an interest in either selling their facilities to us or entering into joint ventures with us to retrofit their plants to produce isobutanol. Collectively, these ethanol plant owners represent over 1.8 BGPY of ethanol capacity. However, there can be no assurance that we will be able to acquire access to ethanol plants from these owners.

We are currently targeting initial commercial production of isobutanol to begin in the first half of 2012. In connection with meeting this target, in August 2010 we entered into an acquisition agreement with Agri-Energy, LLC, Agri-Energy Limited Partnership, CORN-er Stone Ethanol Management, Inc. and CORN-er Stone Farmers Cooperative, referred to collectively as Agri-Energy. In September 2010, we closed the transactions contemplated by the acquisition agreement and acquired a 22 MGPY ethanol production facility in Luverne, Minnesota which we intend to retrofit for isobutanol production. We

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paid a purchase price of approximately \$20.7 million in connection with these transactions. In addition, we acquired and paid for \$4.9 million in estimated working capital. We paid the aggregate purchase price with available cash reserves and previously arranged financing.

### **Our production solution**

We developed our technology platform to be compatible with the existing approximately 20 BGPY of global operating ethanol production capacity. GIFT is designed to allow relatively low capital expenditure retrofits of existing ethanol facilities, enabling a rapid and cost-efficient route to isobutanol production. GIFT isobutanol production is very similar to existing ethanol production, except that we replace the ethanol producing biocatalyst with our isobutanol producing biocatalyst and we incorporate well-known equipment into the production process to separate and collect the isobutanol. We have designed our production technology to minimize the disruption of ethanol production during the retrofit process, mitigating the costs associated with downtime as the plant is modified.

A commercial engineering study completed in May 2010 by ICM, Inc., or ICM, a leading engineering firm that has designed approximately 60% of the RFA-estimated 12 BGPY US operating ethanol production capacity, projected that each GIFT retrofit process would take approximately 14 months to complete. Following an estimated two-week period to transition to isobutanol production, we expect the corn ethanol facility will be able to produce isobutanol, as well as protein fermentation meal as an animal feed co-product, while operating in substantially the same manner as it did prior to the retrofit. Consistent with the practice typical in conventional corn ethanol production, we intend to market the high-protein, high-energy animal feed that will be produced as a co-product of our isobutanol fermentation process to offset a significant portion of our grain feedstock costs.

Through an exclusive alliance with ICM, we have successfully demonstrated the production of isobutanol via the retrofit of a 1 MGPY ethanol facility in St. Joseph, Missouri using our first-generation biocatalyst. We plan to secure access to existing ethanol production facilities through direct acquisitions and joint ventures. We will then work with ICM to deploy our technology platform through retrofit of these production facilities. The May 2010 commercial engineering study completed by ICM estimated the capital costs associated with the retrofit of a standard 50 MGPY ICM-designed corn ethanol plant to be approximately \$22 to 24 million and the capital costs associated with the retrofit of a standard 100 MGPY ICM-designed corn ethanol plant to be approximately \$40 to 45 million. These projected retrofit capital expenditures are substantially less than estimates for new plant construction for the production of advanced biofuels, including cellulosic ethanol.

In September 2010, we acquired a 22 MGPY ethanol production facility in Luverne, Minnesota. Based on ICM's initial evaluation of the Luverne facility, we project capital costs of approximately \$17 million to retrofit this plant to produce 18 MGPY of isobutanol. We have begun the project engineering and permitting portion of the Luverne facility retrofit process and expect to begin commercial production of isobutanol at the Luverne facility in the first half of 2012. We then plan to expand our production capacity beyond this facility to produce and sell over 500 million gallons of isobutanol in 2014.

### **GIFT : Our proprietary biocatalysts, fermentation and recovery process**

Our biocatalysts are microorganisms that have been designed to metabolize sugars to produce isobutanol. Our technology team develops these proprietary biocatalysts to efficiently convert fermentable sugars of all types by engineering isobutanol pathways into the biocatalysts, and then minimizing the production of unwanted by-products to improve isobutanol yield and purity, thereby reducing operating costs. Using our first-generation biocatalyst, based on a bacterial platform, we have

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demonstrated that we can produce isobutanol at key commercial parameters, validating our biotechnology pathways and efficiencies. We are now nearing completion of the development of our second-generation biocatalyst, which uses a yeast platform. This biocatalyst can produce isobutanol from any fuel ethanol feedstock currently in commercial use, including grains (e.g., corn, wheat, sorghum and barley) and sugar cane.

In addition, through an exclusive license and a services arrangement with Cargill, Incorporated, or Cargill, we are working to develop a future-generation yeast biocatalyst specifically designed to efficiently produce isobutanol from the sugars derived from cellulosic feedstocks, including crops that are specifically cultivated to be converted into fuels (e.g., switchgrass), forest residues (e.g., waste wood, pulp and sustainable wood), agricultural residues (e.g., corn stalks, leaves, straw and grasses) and municipal green waste (e.g., grass clippings and yard waste). Our yeast biocatalysts are built upon robust industrial varieties of yeast that are widely used in large-scale fermentation processes, such as ethanol and lactic acid production. We have carefully selected our yeast biocatalyst platforms for their tolerance to isobutanol and other conditions present during an industrial fermentation process, as well as their known utility in large-scale commercial production processes. As a result, we believe our second- and future-generation biocatalysts will be well-suited to produce isobutanol in commercial industrial settings and expect them to equal or exceed the performance of the yeast used in prevailing grain ethanol production processes.

Our proprietary integrated fermentation and recovery process provides enhanced fermentation performance as well as low cost, energy-efficient recovery of isobutanol and other alcohols. GIFT permits the continuous removal of isobutanol as it is formed, allowing our biocatalysts to continue processing sugar into isobutanol at a high rate without being suppressed by rising levels of isobutanol in the fermentor, thereby reducing the time to complete the fermentation. Using our biocatalysts, we have demonstrated that GIFT enables isobutanol fermentation times equal to, or less than, that achieved in the current conventional production of ethanol. Meeting the conventional ethanol fermentation time is important because it allows us to lower capital expenditures by leveraging the existing ethanol infrastructure. Finally, isobutanol's unique characteristics in conjunction with the GIFT system reduce energy consumption during distillation.

### **Our competitive strengths**

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 for the production of plastics, fibers, rubber and other polymers which comprise approximately 40% of the global petrochemicals market, and will have potential applications in substantially all of the global hydrocarbon fuels market, enabling our customers to reduce raw material cost volatility, diversify suppliers and improve feedstock security. We believe that we will face reduced market adoption barriers because products derived from our isobutanol are chemically identical to petroleum-derived products, except that they will contain carbon from renewable sources.

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

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- Ø **Capital-light commercial deployment strategy optimized for existing infrastructure.** We have designed GIFT to enable capital-light retrofits of existing ethanol facilities, which allows us to leverage the existing approximately 20 BGPY of global operating ethanol production capacity. This approach allows us to project substantially lower capital outlays and a faster commercial deployment schedule than the construction of new plants. Notably, our calculations based on expected costs of retrofit, operating costs, volume of isobutanol production and price of isobutanol suggest that GIFT retrofits will result in an approximate two-year payback period on the capital invested in the retrofit.
  
- Ø **GIFT demonstrated at commercially relevant scale.** We have completed the retrofit of a 1 MGPY ethanol facility and successfully produced isobutanol at this facility using our first-generation biocatalyst, achieving our commercial targets for concentration, yield and productivity. These operations also demonstrated the effectiveness of our proprietary technology, confirming the fermentation performance of our biocatalyst technology and our ability to effectively separate isobutanol from water as it is produced. Also, we believe that our acquisition of a 22 MGPY ethanol production facility demonstrates the readiness of our technology for commercial deployment and supports our plan to commence initial commercial-scale isobutanol production in the first half of 2012.
  
- Ø **Strategic relationships with chemicals, fuels and engineering industry leaders.** We have entered into strategic relationships with global industry leaders to accelerate the execution of our commercial deployment strategy both in the US and internationally. A number of our strategic partners are also direct or indirect investors in our company.
  
- Ø **Experienced team with a proven track record.** Our management team offers an exceptional combination of scientific, operational and managerial expertise. Our CEO, Dr. Patrick Gruber, has spent over 20 years developing and successfully commercializing industrial biotechnology products, and our top five executive officers named in this prospectus average 19 years of relevant experience. Across the company, our employees have 450 combined years of biotechnology, synthetic biology and biobased product experience. Our employees have generated over 300 patent and patent application authorships over the course of their careers, and have played key roles in the commercialization of several successful, large-scale industrial biotechnology projects.

### **Our strategy**

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

- Ø **Deploy first commercial production facility.** In September 2010, we acquired a 22 MGPY ethanol production facility in Luverne, Minnesota. We have begun the project engineering and permitting portion of the Luverne facility retrofit process and expect to commence commercial production of approximately 18 MGPY of isobutanol at the Luverne facility in the first half of 2012.
  
- Ø **Enter into supply agreements with customers to support capacity growth.** We intend to transition the letters of intent that we have already received into firm supply agreements, and then add to our customer pipeline by entering into isobutanol supply agreements for further capacity with additional customers in the refining, specialty chemicals and transportation sectors both in the US and internationally.
  
- Ø **Expand our production capacity via retrofit of additional existing ethanol facilities.** As we secure supply agreements with customers, we plan to acquire or gain access to additional and larger scale ethanol facilities via acquisitions or joint ventures. We believe that our exclusive alliance with ICM will enhance our ability to rapidly deploy our technology on a commercial scale at these facilities. We plan to acquire access to additional production capacity to enable us to produce and sell over 500 million gallons of isobutanol in 2014.

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- Ø **Expand adoption of our isobutanol across multiple applications and markets.** We intend to drive adoption of our isobutanol in multiple US and international chemicals and fuels end-markets by offering a renewable product with superior properties at a competitive price. In addition, we intend to leverage existing and potential strategic partnerships with hydrocarbon companies to accelerate the use of isobutanol as a building block for drop-in hydrocarbons. This strategy will be implemented through direct supply agreements with leading chemicals and fuels companies, as well as through alliances with key technology providers.
  
- Ø **Align the value chain for our isobutanol by collaborating with large brand owners.** We are developing relationships with large brand owners to purchase products made from our isobutanol by third-party chemicals and fuels companies. For example, we recently entered into a letter of intent with United Air Lines, Inc. to purchase significant quantities of renewable jet fuel made from our isobutanol. We intend to use these relationships to obtain contracts to sell our isobutanol directly into the manufacturing chain that will use our isobutanol as a building block in the production of renewable jet fuel.
  
- Ø **Incorporate additional feedstocks into our isobutanol production facilities.** Our second-generation biocatalyst can produce isobutanol from any fuel ethanol feedstock currently in commercial use, including grains (e.g., corn, wheat, sorghum and barley) and sugar cane. We are developing a future-generation biocatalyst under contract with Cargill. We believe that this future-generation biocatalyst will enable us to efficiently integrate mixed sugars from cellulosic feedstocks into our production facilities when the technology to separate and break down cellulosic biomass into separate simple sugar molecules becomes commercially available. While our initial focus is to access corn ethanol facilities in the US, the ability of our biocatalyst to produce isobutanol from multiple feedstocks will support our future efforts to expand production of isobutanol into international markets that use sugar cane or other grain feedstocks, either directly or through partnerships.

**Summary risk factors**

Our business is subject to numerous risks and uncertainties that you should understand before making an investment decision. These risks are discussed more fully in the section entitled "Risk Factors" beginning on page 15 of this prospectus. These include:

- Ø we are a development stage company and have not generated any revenues from the sale of isobutanol, and our business may fail if we are not able to successfully commercialize isobutanol and the products derived from it;
  
- Ø we have incurred losses to date, anticipate continuing to incur losses in the future and may never achieve or sustain profitability;
  
- Ø we have no experience producing isobutanol at the commercial scale needed for the development of our business, and we will not succeed if we cannot produce commercial quantities of isobutanol in a timely and economic manner;
  
- Ø our strategy involves accessing and retrofitting existing ethanol production facilities to produce isobutanol and we may not be able to meet the volume demands of our potential customers if we are unable to successfully identify and acquire access to facilities suitable for efficient retrofitting;
  
- Ø we have no experience retrofitting ethanol production facilities to produce isobutanol or operating commercial isobutanol facilities, and any unexpected delays, operational difficulties, cost-overruns or failures in the retrofit process could slow our commercial production of isobutanol and harm our performance;
  
- Ø no market currently exists for isobutanol as a fuel, a fuel blendstock or a building block for the production of hydrocarbons, and our business may fail if we are unable to successfully market our isobutanol to potential customers, including refiners and chemical producers;





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- ∅ we intend to market our isobutanol as a building block in the production of biofuels and biobased alternatives to petroleum-based products, and if the price of oil falls our customers may be unable to produce biobased products that are commercially viable alternatives to petroleum-based products;
  
- ∅ we may not be able to obtain regulatory approval for the use of our isobutanol in the fuels and chemicals markets;
  
- ∅ we have agreed to preliminary terms for a number of supply agreements with future customers, however, none of these agreements are binding and our performance may suffer if we fail to successfully transition these preliminary commitments into definitive supply agreements or to negotiate sufficient long-term supply agreements for our production of isobutanol;
  
- ∅ we believe that our isobutanol is fully compatible with existing refinery and transportation infrastructure but if our isobutanol proves unsuitable for use in the existing infrastructure, the market adoption of our isobutanol may be adversely affected;
  
- ∅ fluctuations in the price of corn and other feedstocks may affect our cost structure; and
  
- ∅ concerns about genetically engineered products and processes, and similar concerns about feedstocks grown on land that could be used for food production, could limit our revenues.

### **Industry overview**

Petroleum is a fundamental source of chemicals and fuels, with annual global demand in 2008 estimated at \$3.0 trillion, based on data from the IEA and EIA. Today's organic chemicals and fuels are predominantly derived from petroleum, as it historically has been convenient and inexpensive. However, recent fundamental trends including increasing petroleum demand (especially from emerging markets), limited new supply, price volatility and the changing regulatory framework in the US and internationally with regard to the environmental impact of fossil fuels, has increased the need for economical, renewable and environmentally sensitive alternatives to petroleum at stable prices.

These market developments, combined with advances in synthetic biology and metabolic pathway engineering, have encouraged the convergence between the industrial biotechnology and energy sectors. These new technologies enable the production of flexible platform chemicals, such as isobutanol, from renewable sources instead of fossil fuels, at economically attractive costs. We believe that isobutanol and the products derived from it will have potential applications in approximately 40% of the global petrochemicals market and substantially all of the global fuels market, and that our isobutanol fulfills an immediate need for alternatives to petroleum.

### **Corporate information**

We were incorporated in Delaware in June 2005 under the name Methanotech, Inc. and filed an amendment to our certificate of incorporation changing our name to Gevo, Inc. on March 29, 2006. Our principal executive offices are located at 345 Inverness Drive South, Building C, Suite 310, Englewood, CO 80112, and our telephone number is (303) 858-8358. Our website address is [www.gevo.com](http://www.gevo.com). Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be part of this prospectus.

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



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## The offering

Common stock offered by Gevo	shares (or shares if the underwriters exercise their option to purchase additional shares in full).
Common stock to be outstanding after this offering.	shares (or shares if the underwriters exercise their option to purchase additional shares in full).
Proposed Nasdaq Global Market symbol	GEVO
Use of proceeds	We currently intend to use all or a portion of the net proceeds of this offering, together with existing cash and cash equivalents, to acquire access to ethanol facilities through direct acquisition and joint ventures, and retrofit those facilities to produce isobutanol. We completed our acquisition of Agri-Energy in September 2010, and we do not have agreements or commitments for any other specific acquisitions at this time. We may also use a portion of the net proceeds of this offering to fund working capital and other general corporate purposes, including paying off certain of our long-term debt obligations and the costs associated with being a public company. Please see Use of Proceeds.
Risk factors	See Risk Factors starting on page 15 of this prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock.
The number of shares of common stock to be outstanding after this offering is based on 15,774,259 shares outstanding as of September 30, 2010 and excludes:	
Ø 2,894,265 shares of common stock issuable upon the exercise of options outstanding as of September 30, 2010 at a weighted average exercise price of \$2.83 per share;	
Ø 858,000 shares of common stock issuable upon the exercise of outstanding common stock warrants as of September 30, 2010 at an exercise price of \$2.70 per share;	
Ø 303,173 shares of common stock issuable upon the exercise of outstanding preferred stock warrants as of September 30, 2010 at a weighted average exercise price of \$9.46 per share, based on the one-to-one conversion rate in effect as of September 30, 2010 (see Note 10 of our consolidated financial statements for conversion ratio adjustments that may be applicable upon future events, such as the completion of this offering); and	

