A Low-Cost Carbon Abatement Company for Hard to Decarbonize Sectors

Corporate Presentation January 2024



NASDAQ: GEVO



Forward Looking Statement



Any statements in this presentation about Gevo's future expectations, plans, trends, outlook, projections and prospects, and other statements containing the words "believes," "anticipates," "plans," "estimates," "expects," "intends," "may," "will," "would," "could," "can" and similar expressions, constitute forwardlooking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the Private Securities Litigation Reform Act of 1995, including, without limitation, statements related to our growth and future operating results and trends, our renewable natural gas ("RNG") project, our proprietary systems and technology, Verity Carbon Solutions, carbon intensity ("CI"), our Net-Zero Integrated Technology, our strategy, plans, objectives, expectations (financial or otherwise) and intentions, future financial results and growth potential, including our Net-Zero 1 Project, the timing and status of development of our projects, our ability to produce net-zero CI fuels and chemicals, our ability to finance and construct production facilities to produce products, intellectual property and other statements that are not historical facts. For this purpose, any statement that is not a statement of historical fact should be considered a forward-looking statement. We cannot assure you that our estimates, assumptions and expectations will prove to have been correct. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including risks relating to, among others: financing and supply chains, and global and U.S. economic conditions (including inflation and rising interest rates); and factors discussed in the "Risk Factors" of our most recent Annual Report on Form 10-K and in other filings that we periodically make with the Securities and Exchange Commission (the "SEC"). In addition, the forward-looking statements included in this presentation represent our views as of the date of this presentation. Important factors could cause actual results to differ materially from those indicated or implied by forward-looking statements, and as such we anticipate that subsequent events and developments will cause our views to change. Except as required by applicable law, we undertake no intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, and readers should not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this presentation.

Pictured left: R&D and demonstration facility in Luverne, MN.

Carbon Abatement: The Economic Opportunity Is Now



Atmospheric Carbon Dioxide



Source: <u>https://climate.nasa.gov/vital-signs/carbon-dioxide/</u> Dashed line and label added to original to reflect CO2 levels during ice ages (around 200ppm). Label added to reflect beginning of industrial revolution / widespread burning of fossil fuels

But Not Everything Can Be Electrified



The world needs low-carbon, drop-in:

- **Food**, and an equitable energy transition which includes rural community participation
- **Fuel**, in the form of energy-dense liquids that work in existing heavy-duty, long-haul engines and infrastructure
- **Materials**, including everything from cosmetics, shoes, diapers to the bumpers on electric vehicles currently made from the chemical products of fossil fuels

Shawn Feikema, Leading Climate Smart Ag Farmer: "We can simultaneously grow products for the food chain, the raw materials for liquid fuels like SAF, while capturing carbon and improving our land, all while improving profitability."

Our Businesses





Our Market Focus



We develop, commercialize and produce low-carbon, drop-in fuels and chemicals that are sustainable, affordable and scalable

Massive, difficult-to-decarbonize markets served by our product portfolio



Gevo Today

- Nasdaq: GEVO
- Headquarters in Englewood, CO
- More than 350 patents issued, many more filed



*Owned by Trecora Hydrocarbons LLC, formerly by South Hampton Resources, Inc. Historically operated in partnership with Gevo to produce SAF and bio-octane from Gevo's alcohol production in Luverne, MN.



Headquarters Englewood, CO



SAF, Bio-Octane*



Dairy Manure RNG Captured Methane





R&D, Demo Facility Ethanol, Isobutanol, Food, Wind



Greenfield Facility Food, SAF, Renewable Diesel, Bio-Naphtha



Verity Carbon Solutions Carbon Tracking MRV

7

Competitive Strengths





Fully-Funded Development Plan

- \$376 million of cash and restricted cash⁽¹⁾
- Net-Zero 1 project will be construction financed at the project level
- US Dept. of Energy loan guarantee in process
- Contracted demand is +5x
 our first plant



Experienced Team

- Proven leaders in development, commercialization, and project deployment for renewable-based projects
- Numerous industry firsts
- First mover Alcohol-to-Jet (ATJ) Sustainable Aviation
 Fuel (SAF)⁽²⁾



Proprietary, Innovative, low-carbon process design

- Based on proven, scaled, operating technologies
- Feedstock flexible, most any plant sugar can serve as feedstock, including cellulosics



Integrated Business System Approach

- Sourcing carbon to end use with traceable carbon abatement
- Renewable energy and hydrogen
- Leads to innovative low cost carbon abatement and competitive cost products

Pictured above: wind turbine at Luverne, MN facility; processing plant at Luverne, MN.

(1) As of December 31, 2023.

(2) First to obtain ASTM approval for ATJ in 2016.

Strong Liquidity



We have significant flexibility over the timing and amount of our growth spending.



2024 Expected Uses of Cash (\$ millions)

(1) Includes growth projects development including Net-Zero potential ATJ sites, and Luverne.

(2) The box illustrates the amount previously spent as of end of 2023 of \$111mm, plus midpoint of the range of Net-Zero 1 expected project development in 2024.

Experienced Team



Our team has crossover experience at the nexus of agriculture, bio-based chemicals, energy and policy.

- History of development and deployment of low-carbon alternatives
- More than 180 years of collective experience
- Have successfully taken multiple technologies to full commercial plants
- First to commercialize renewable plastics (polylactic acid or PLA)
- Experienced in fermentation, chemical processing, plant operations, and renewable energy, and renewable product market development and commercialization



Sustainable Aviation Fuel



Enormous Addressable Market



Alcohol-to-Jet (ATJ) is expected to fulfill most SAF demand, and this is our focus

Forecasted SAF demand by 2050 in US alone equals:

- 400 times the size of our first greenfield plant
- 1,200 times existing supply

Forecasted US SAF Fulfillment (billion gallons per year)



Contracted Demand



Our contracted customers include many of the world's leading airlines

~350 million gallons per year Contracted demand for our SAF

= More than 5 times Capacity of our greenfield SAF plant



We Make SAF From Plant Sugars





14



Our Greenfield SAF Plant: Net Zero 1



- Location: 240 acres in Lake Preston, SD with room for future expansions
- **Products:** Animal feed and vegetable oil, SAF, Renewable Diesel and Bio-Naphtha
- **Carbon Intensity:** Targeting negative emissions⁽¹⁾
 - Purpose-built, low-carbon design with direct wind and onsite green hydrogen
 - CCS, plus optionality for dairy RNG from our wholly-owned Iowa assets
 - Field-to-fuel traceability in climate-smart area
- Distribution:
 - Railyard onsite for product distribution
 - Nearby state SAF credit markets (MN, IL)
- Timing: Construction of ~24 months; to start after EPC contract price and schedule finalized and US Dept. of Energy loan secured (targeted in 2H 2024)

| Completed | In Process |
|-----------------------------|---|
| ✓ Site control | [] EPC fully installed contracted price and associated value engineering [] Construction financing |
| ✓ Major permits | |
| 🗸 FEED / plant design | |
| Contracted demand | |
| 🗸 Gevo, Inc. equity capital | |

FULLY FUNDED PROJECT DEVELOPMENT PLAN⁽²⁾



US DEPT OF ENERGY LOAN GUARANTEE IN PROCESS

Most Competitive Cash Cost of Production



SAF Cash Cost of Production vs. Fossil Jet Fuel





ATJ SAF production cash costs are expected to be competitive with fossil jet fuel, even though ATJ SAF can deliver 100% or more carbon abatement per gallon

Gevo's proprietary integrated process design and technologies lead to most favored competitive position

The future of aviation is **Alcohol-to-Jet**; it's the most competitive on a cash cost of production basis

Based on work done by an independent global consulting firm, Nexant, Cancawe-Aramco, and Gevo analysis. SAF production cash cost shown before Federal and state incentives such as RINs, LCFS, 45Z and other state SAF tax credits, and before new capital cost. ATJ SAF cost assumes approximately \$5.00/bu corn for illustrative purposes; estimates dependent on feedstock prices and other assumptions.

Power-

Most Competitive SAF Carbon Abatement

Carbon Abatement Cost (\$ per ton of CO₂ equivalent¹)



R

Cost of Carbon Abatement is low enough that the carbon value from environmental incentives (RINs, Federal, State level) can make the SAF affordable to airlines

Based work done by an independent global consulting firm which includes on external market data and internal estimates. (1) Carbon abatement cost = (Cost of SAF production + Cost of capital – Fossil jet price of \$2.08/gal) / (Fossil jet Carbon Intensity 89 gCO2e/MJ – SAF Carbon Intensity) x Conversion Factor. Conversion Factor = 1,000,000 gCO2e per ton / 119,777 BTU per gal jet x 948 Btu per MJ. (2) State and Federal incentives include incentives such as the 45Z, California LCFS, RINs and state SAF tax credits, as applicable. Based on internal estimates for Gevo Net-Zero 1 greenfield SAF plant. (3) Soybean oil (43 CI), assumes brownfield HEFA facility \$6.80-7.01/gallon production and capital cost. (4) Forestry residues (4 CI). (5) Combustion point source CO2 (12 CI).

Plant Design Enables Growth

Why create a standardized design?

- Benefits carry over to future Net-Zero ATJ plants
- Focusing on units 1x and 3x size of Net-Zero 1
- Working with strong partners: FluidQuip, Axens, Praj and others
- Capital formation optionality: plant design may be utilized by Gevo at future Net-Zero sites, licensed to third parties, or both

Why use a modularized, pre-fabricated design?

- **Reduces** on-site labor cost during construction
- Reduces construction time
- Reduces construction risk





Plant Design Highlights

- Proprietary Design Reduces Carbon Intensity by 60 gCO2e/MJ before CCS, RNG, climate smart ag
 - Improved energy efficiencies
 - Electrification reduces fossil fuel use
 - Ethanol and ATJ integration
 - 65% less natural gas use
- Multiple patents filed

Precedent for a Rapid Buildout



During the 2000's, dozens of ethanol plants were built in the US

The pace of buildout reached 2 billion gallons of capacity added each year

This equates to about 20 plants per year



Favorable Long Term Dynamics





- **Target rich environment:** the US is the world's largest corn and ethanol producer with nearly 200 ethanol plants
- Surplus ethanol could meet all US SAF demand as passenger vehicles are electrified
- Net-Zero 1 will be competitively advantaged delivering low cost, low CI SAF
 - Optionality to process cellulosic sugars and ethanol, too



Verified Traceability Solution

For Carbon and Sustainability Markets

www.veritytracking.com

The Problem

How can consumers, businesses and policymakers have confidence that a product is sustainable?



- Commodity products look identical to the end user – that's part of their value
- But low-carbon, drop-in products take a unique path through the value chain
- The entire value chain determines the carbon footprint of the product





The Solution



Verity enables the accurate tracking of carbon intensity across end-to-end value chains to help customers unlock and maximize value derived from carbon abatement

- Measure, Report and Verify (MRV) Software-as-a-Service (SaaS) business
- Verity Carbon Solutions began development in 2020 as a necessary and value-added service for our SAF production
- Since expanded to serve a growing ethanol customer base



Value creation through proprietary digital MRV platform and full carbon accounting for tax, compliance and voluntary incentive

How it Works: Ethanol Example





Field to Fuel Low CI Products

> Ethanol WDGs DDGs Corn Syrup Corn Oil

Large, Growing Customer Base



Potential Size of Value Pool for Customers Tracked and Enabled



Current Customer Base

- **3** ethanol producer customers contracted, and growing
- **2%** of the total US ethanol market or +300 million gallons per year

100% farmer retention in the grower program comprising**65,000 acres** and growing

For comparison, total value pool of all major global compliance carbon markets in 2023: **\$800 billion**

Source: IRA and CBAM tax credit and carbon tax value, Bloomberg.

(1) US ethanol production plants market size is approximately 15 billion gallons per year. Potential value pool dollar amount lower bound based on assuming half of US plants achieving a 10 CI point reduction valued at \$0.02 per gallon per CI point under 50 gCO2e/MJ under 45Z tax credit.

Capital Light, Fee-Based Business





⁽¹⁾ Based on 45-Z tax credit alone, not including other involuntary and voluntary carbon regimes. Assumes \$0.02 per gallon perCI point under 50 gCO2e/MJ of value from the 45-Z tax credit at a 100 million gpy plant achieving a 10 CI point reduction below the 50% GHG reduction threshold.

Transitioning To Growth Phase





Current Target Markets Represent a Fraction of Total Markets Requiring Carbon Tracking Solutions





We are actively commercializing solutions from feedstocks to biofuels and SAF

Renewable Natural Gas



Dairy Cow Manure to RNG in NW Iowa



- 400,000 MMBTU per year of capacity
- Adjusted Non-GAAP cash EBITDA⁽¹⁾ of \$1.7 million in the quarter 3Q 2023, at the temporary startup CARB CI score of -150 gCO2e/MJ
 - EBITDA growth expected in 2024 from obtaining permanent CARB CI score (targeting -350 gCO2e/MJ)
- Optionality to haul biogas to our SAF plants to trim Carbon Intensity at Luverne, or NZ1 plants





BP is the purchaser and distribution partner selling the RNG into road transportation market



Embedded Growth

RNG growth

sources

expected from

or construction



32

Gevo NW Iowa RNG Adj. EBITDA Potential⁽¹⁾ (\$ millions)

multiple potential \$55 Does not require material further capital investment \$7 3Q23 Permanent LCFS Price Biogas 45-Z Total

Annualized CARBCI Recovery to Production potential Adj. EBITDA Score (350) \$200/MT Tax Credit⁽²⁾

- (1) Cash EBITDA is a non-GAAP measure calculated by adding back depreciation and amortization and non-cash stock-based compensation to GAAP loss from operations. A reconciliation of cash EBITDA to GAAP loss from operations is provided in the financial statement tables in our 3Q 2023 earnings release and in the Appendix.
- (2) Biogas 45-Z PTC from Inflation Reduction Act for three years, from 2025 2027. Amount shown based on current management estimates based on (350) Carbon Intensity. Subject to final guidance from US Treasury.

Specialty Chemicals, Plastics, Fuels, Technology and Licensing



Carbon Negative Chemicals and Materials



Examples of End Products



- Pilot plant operating (ETO)
- Multiple Patents Filed
- Leads to low cost, carbon negative footprint for chemicals and materials
- First License Already Done

LG Chem

Gevo Enters Joint Development Agreement with LG Chem to Develop Bio-Propylene

April 12, 2023

ENGLEWOOD, Colo., April 12, 2023 (GLOBE NEWSWIRE) -- Gevo, Inc. (NASDAQ: GEVO) and LG Chem, Ltd. (KRX: 051910), a leading global chemical company committed to producing sustainable products, announced today that they have entered into a joint development agreement (the "Agreement") to develop bio-propylene for renewable chemicals using Gevo's Ethanol-to-Olefins (ETO) technology.

Financial Highlights



Balance Sheet Highlights



| (\$ in millions) | September 30, 2023 | | |
|--|-------------------------------|--|--|
| Cash and cash equivalents | \$324 | | |
| Restricted Cash | 78 | | |
| Property, plant and equipment, net | 238 | | |
| Total assets | 670 | | |
| Tax exempt green bonds (NW Iowa RNG) 1.5% interest | 68 | | |
| Total stockholder's equity | 572 | | |
| Equity market value as of January 19, 2024 ¹ : Discount to book equity value: | \$209 million (63%) | | |

Substantial Upside



Balance Sheet as of September 30, 2023

| Share price as of Jan 19, 2024 | \$0.87 |
|---|--------------|
| Shares outstanding (mm) ⁽¹⁾ | 240.30 |
| Market value of equity | \$209 |
| Plus: Tax exempt green bonds (NW Iowa RNG) | 68 |
| Less: Cash, equivalents and restricted cash | (401) |
| Market implied enterprise value | (\$124) |
| | |

| Sources of Value | Commentary |
|---------------------------------------|--|
| Intellectual Property | \$412mm Peak Value IP analysis ⁽²⁾ |
| Cash, equivalents and restricted cash | \$401mm as of 3Q23 |
| Property, plant & equipment | \$238mm as of 3Q23 |
| NW Iowa Dairy RNG | \$7 –16mm |
| | Run-rate Adj EBITDA ⁽³⁾ |
| Net-Zero 1, Greenfield | First mover, project finance |
| SAF project | strategy; development fully funded: reusable design |
| Verity Carbon Solutions | Capital light |
| | first revenue in 2024E |
| Ethanol-to-Olefins | New technology |
| | Pilot plant startup |
| | Licensing revenues began in 2023 |

(1) 240,304,735 shares outstanding as of 11/13/2023 in 3Q 2023 10-Q filing.
 (2) Peak Value, LLC valuation of Gevo IP commissioned in 2020. Does not include subsequent acquisition of Butamax patent estate in 2021 and subsequent patents or Ethanol-to-Olefins (ETO).

(3) Run-rate includes expected permanent CARB CI pathway at current LCFS prices of ~\$75/MT.

Catalyst Rich Step Change Opportunity



SAF plants project milestones

Verity Carbon Solutions first revenue

Gevo NW Iowa RNG embedded growth



Appendix



Our SAF has Been Used Globally





Putting it all Together with Argonne GREET: How we are Planning to Drive Carbon Intensity Down





ILUC - Indirect Land Use. CCS - Carbon Capture Sequestration. CI - Carbon Intensity

Pioneers in Net-Zero Fuels and Chemicals

Many firsts in alcohol-to-hydrocarbons, chemicals, Net-Zero and carbon negative technologies



2010 First to make renewable AvGas



2010 First to make fully renewable synthetic butylene rubber



2011 First to produce alcohol-to-jet (ATJ) and gasoline at Demonstration Plant scale

2011



First to make fully renewable p-xylene and PET for bottles, films, and fibers



2012 First to prove commercial isobutanol (IBA) fermentation at scale

2014

First successful demonstration of side-byside commercial scale production of ethanol and isobutanol



2014 First ATJ SAF flights (US Navy Warthog)



2014 First to alcohol to polymer grade biobased propylene from alcohol



2015 First to Fly with ATJ made From wood waste, flown by Alaska Airlines



2015 First Commercial sale of IBA blended gasoline at retail



2016 First to obtain ASTM approval for ATJ First to demonstrate ATJ work at O'Hare



2017 First commercial sale of renewable premium aasoline

2017 First ATJ in Australia, flown by Virgin Australia



2018 First ATJ Business Aviation off-take agreement (AvFuel)



2019 First to receive ISCC+ Global Sustainability Certification for ATJ



2019 First long-term, take-or-pay ATJ agreement (Delta Airlines)



2019 First to design an integrated net-zero alcohol and hydrocarbons plants with off-the-grid capability



2020



First to obtain certification from Roundtable for Sustainable Biomaterials (RSB)



2021

First to do peer reviewed published LCA of ATJ



2022 First to design a large scale ATJ plant



2022 First to break ground on a Net-Zero Hydrocarbon Facility (Lake Preston, SD)





| Non-GAAP Cash EBITDA (Gevo NW Iowa RNG \$1000s | i) Three M 9/ | Three Months Ended 9/30/2023 | |
|---|------------------|---------------------------------|--|
| | | | |
| Loss From Operations | \$ | (230) | |
| Depreciation & Amortization | \$ | 1,914 | |
| Stock-based Compensation | \$ | 18 | |
| Non-GAAP cash EBITDA Q3 2023 | \$ | 1,702 | |
| | | | |
| Non-GAAP cash EBITDA Annualized | \$ | 6,807 | |