

A scenic view of several wind turbines on a grassy hill under a dramatic sunset sky with orange and blue clouds.

# Beyond Net-Zero – June Investor Deck

June 2021



## FORWARD LOOKING STATEMENTS

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Any statements in this presentation about our future expectations, plans, outlook and prospects, and other statements containing the words “believes,” “anticipates,” “plans,” “estimates,” “expects,” “intends,” “may” and similar expressions, constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including risks relating to: our Net-Zero 1 project and other projects; the success of our sales and production efforts in support of the commercialization of our products; our growth plans and strategies; our technologies; the sizes of markets for our products; the benefits and characteristics of our products, including CI score and reductions in greenhouse gas emissions; our ability to obtain and maintain certifications related to our products; our ability to enter into additional contracts to sell our products; the status of our contract discussions and negotiations; memoranda of understanding, discussions and negotiations relating to potential projects; our ability to raise funds to continue operations or fund growth projects; our projected revenues or sales; our ability to perform under current or future contracts; our ability to become profitable; our projections of internal rates of return on investments for our projects; and other factors discussed in the “Risk Factors” of our most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2020 and in other filings that we periodically make with the SEC. In addition, the forward-looking statements included in this investor presentation represent our views as of the date of this investor presentation. Important factors could cause our 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. However, while we may elect to update these forward-looking statements at some point in the future, we specifically disclaim any obligation to do so. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date of this investor presentation.

# Gaining Perspective and Framing the Problem



## GAINING PERSPECTIVE

**It's the burning of fossil carbon to make electricity, to heat buildings and production processes, and for transportation that generates the vast majority of GHG emissions**

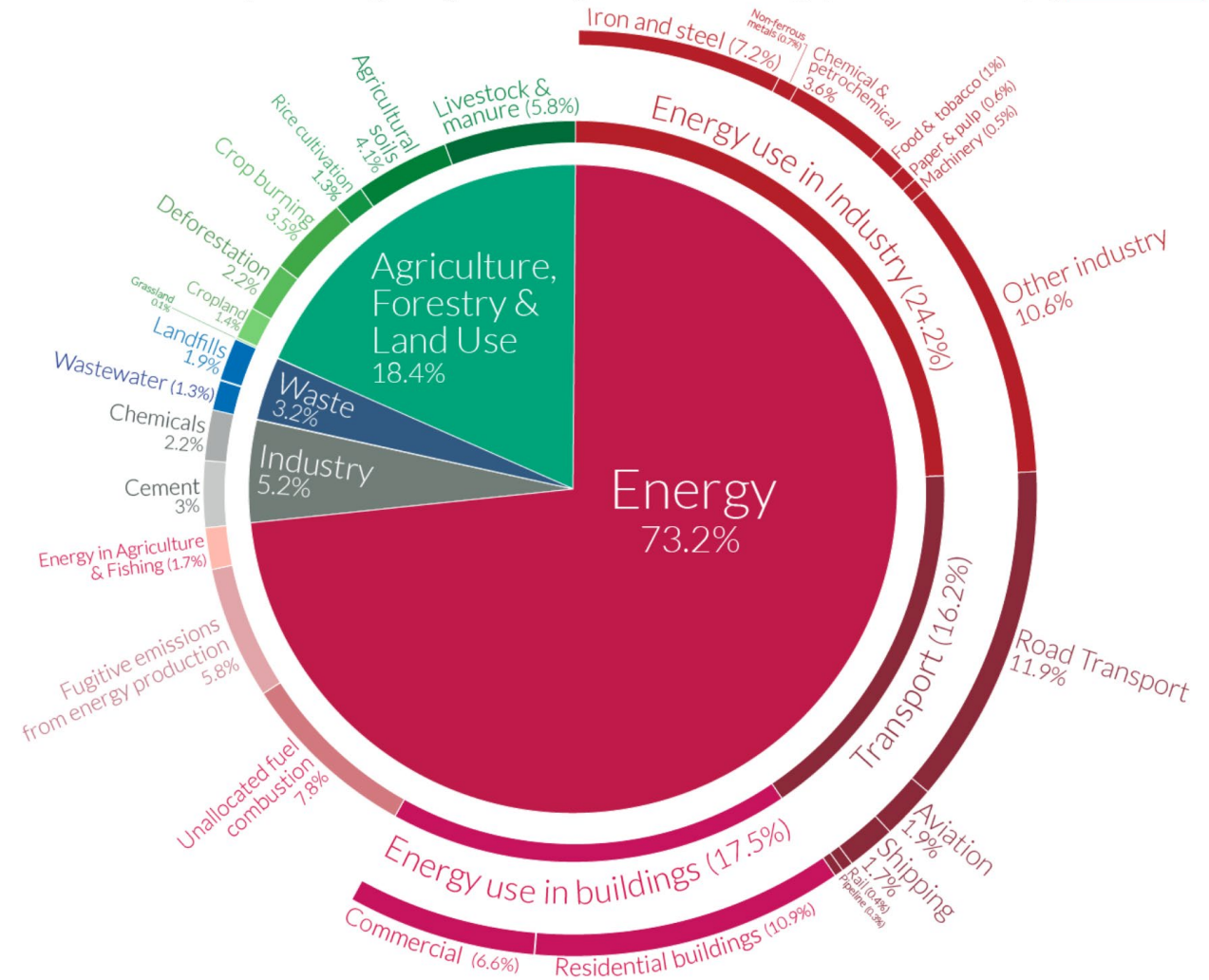
**Electricity demand is going to go up:**

- **30% of people in the world don't have access to electricity**
- **Demand in transportation sector will increase**

## Global greenhouse gas emissions by sector

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO<sub>2</sub>eq.

Our World  
in Data



OurWorldinData.org – Research and data to make progress against the world's largest problems.

Source: Climate Watch, the World Resources Institute (2020).

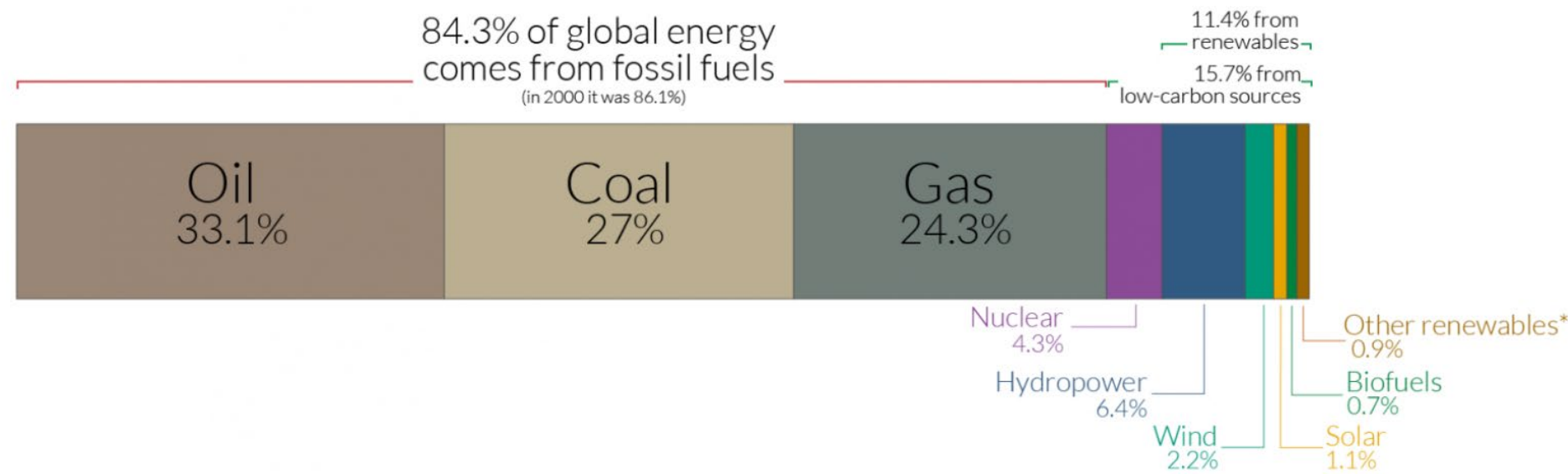
Licensed under CC-BY by the author Hannah Ritchie (2020).



# Global primary energy consumption by source



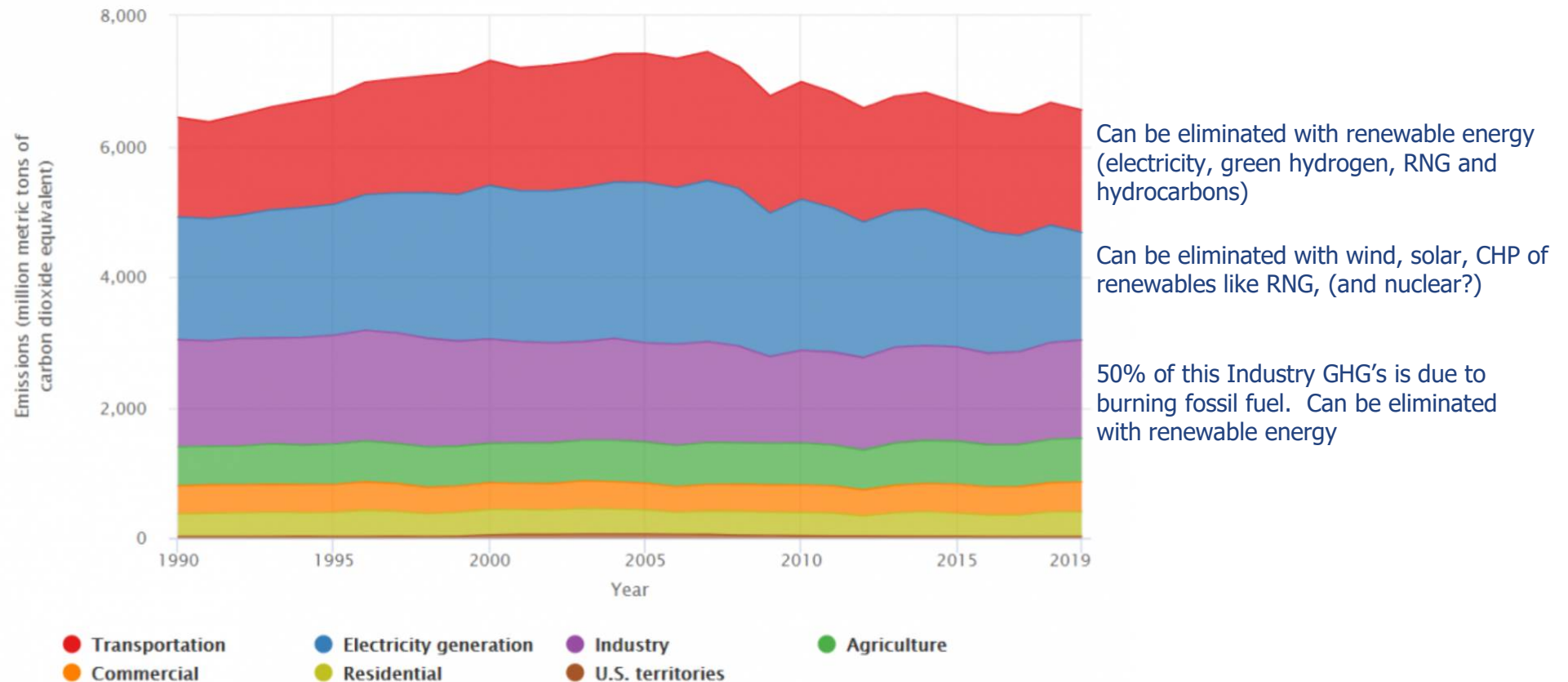
The breakdown of primary energy is shown based on the ‘substitution’ method which takes account of inefficiencies in energy production from fossil fuels. This is based on global energy for 2019.



\*\*'Other renewables' includes geothermal, biomass, wave and tidal. It does not include traditional biomass which can be a key energy source in lower income settings.  
OurWorldinData.org – Research and data to make progress against the world’s largest problems.  
Source: Our World in Data based on BP Statistical Review of World Energy (2020).  
Licensed under CC-BY by the author Hannah Ritchie.

# IN THE US: ELECTRICITY, TRANSPORTATION, AND INDUSTRY NEED TO BE PRIMARY TARGETS FOR GHG REDUCTION—**WE NEED TO REPOWER (FASTER)**

U.S. Greenhouse Gas Emissions by Economic Sector, 1990–2019



Source: U.S. EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2019.  
<https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>

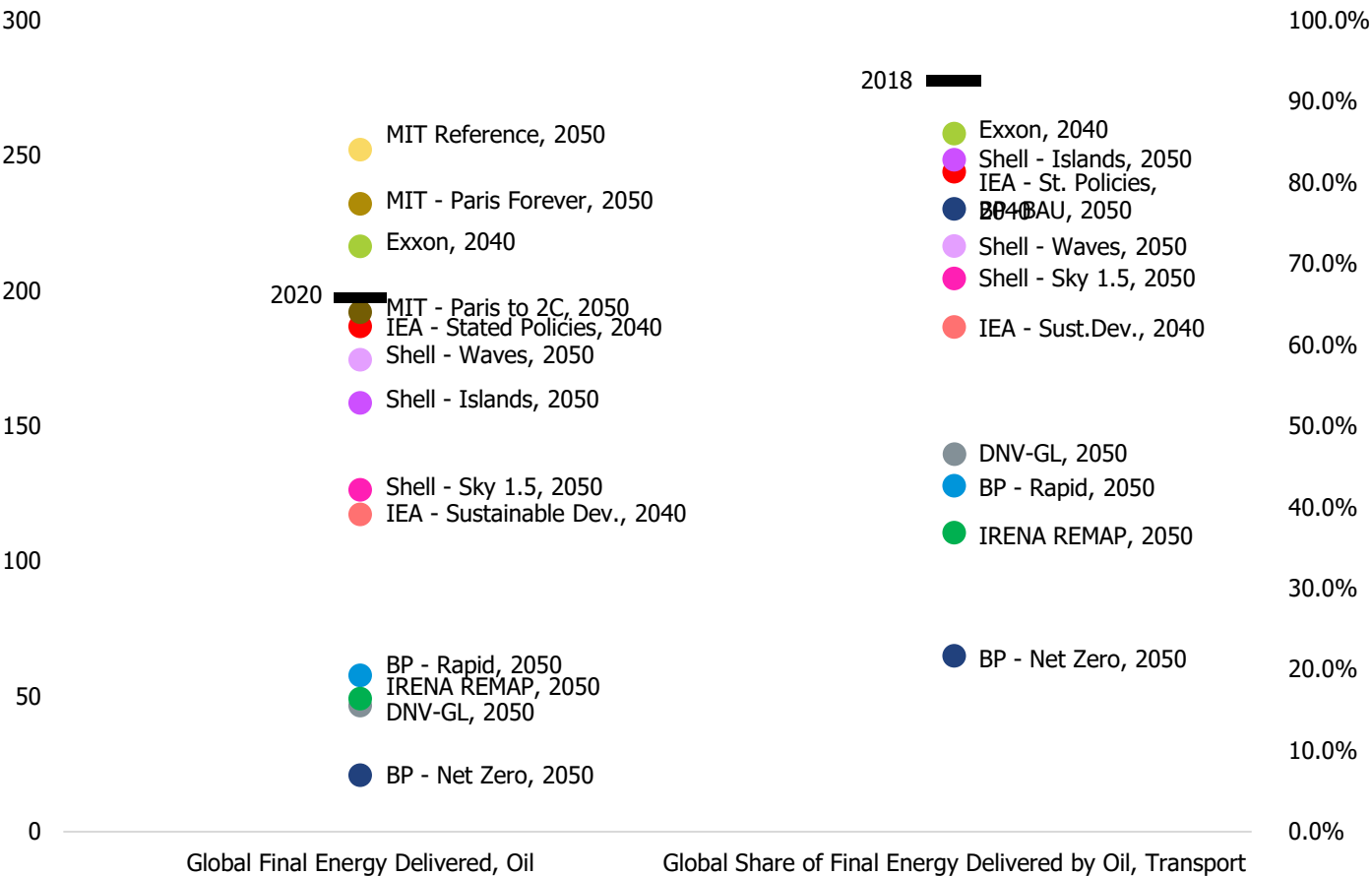
# TRANSPORTATION SECTOR: EVEN IN THE MOST OPTIMISTIC ELECTRIC VEHICLE, FUEL CELL, HYBRID CASES THE DEMAND FOR HYDROCARBON FUELS IS IN THE **HUNDREDS OF BILLIONS OF GALLONS**

## The current market size is ~900B Gallons (WW)

- In the **median scenario**, energy dense hydrocarbons are forecast to fuel **57% of transport energy in 2050**
  - These estimates already incorporate aggressive EV adoption and higher shares of renewable energy, including biomass-based renewable fuels.
- Even **in the most-aggressive mitigation scenario, oil is projected to fuel over 20%** of the global transport sector in 2050.
- In the **least-aggressive scenario**, energy dense liquids will fuel nearly **83%** of the global transport sector in 2050.

### Final Energy Delivered, Hydrocarbons

Global, EJ per Year (left) and Share of Transport Sector (% , right)



# ENORMOUS TOTAL ADDRESSABLE MARKET

## Total Market



**888 Billion**  
gallons per year<sup>(1)</sup>

**2030E Global Liquid Fuels Demand**

## 80%+ EV Scenario (Low Estimate)



**245 Billion**  
gallons per year

**2050E Global Liquid Fuels Demand Required in 80% EV Scenario<sup>(2)</sup>**

## Single Net-Zero Plant Capacity

- Gevo expects to be able to change the mix of jet fuel and gasoline production with a catalyst change
- Jet fuel is uniquely reliant on low-carbon replacements to achieve net-zero (cannot be replaced by EVs)
- Increasing value for Gevo's isooctane for both low-carbon attributes, and as a high-quality blendstock to upgrade to premium gasoline (vehicle get better mileage, less smog, et.)

**45 Million**  
gallons per year<sup>(3)</sup>

**Planned Capacity of One Gevo Net-Zero plant**  
**Represents 0.02% of Market in 80%+ EV Scenario<sup>(2)</sup>**

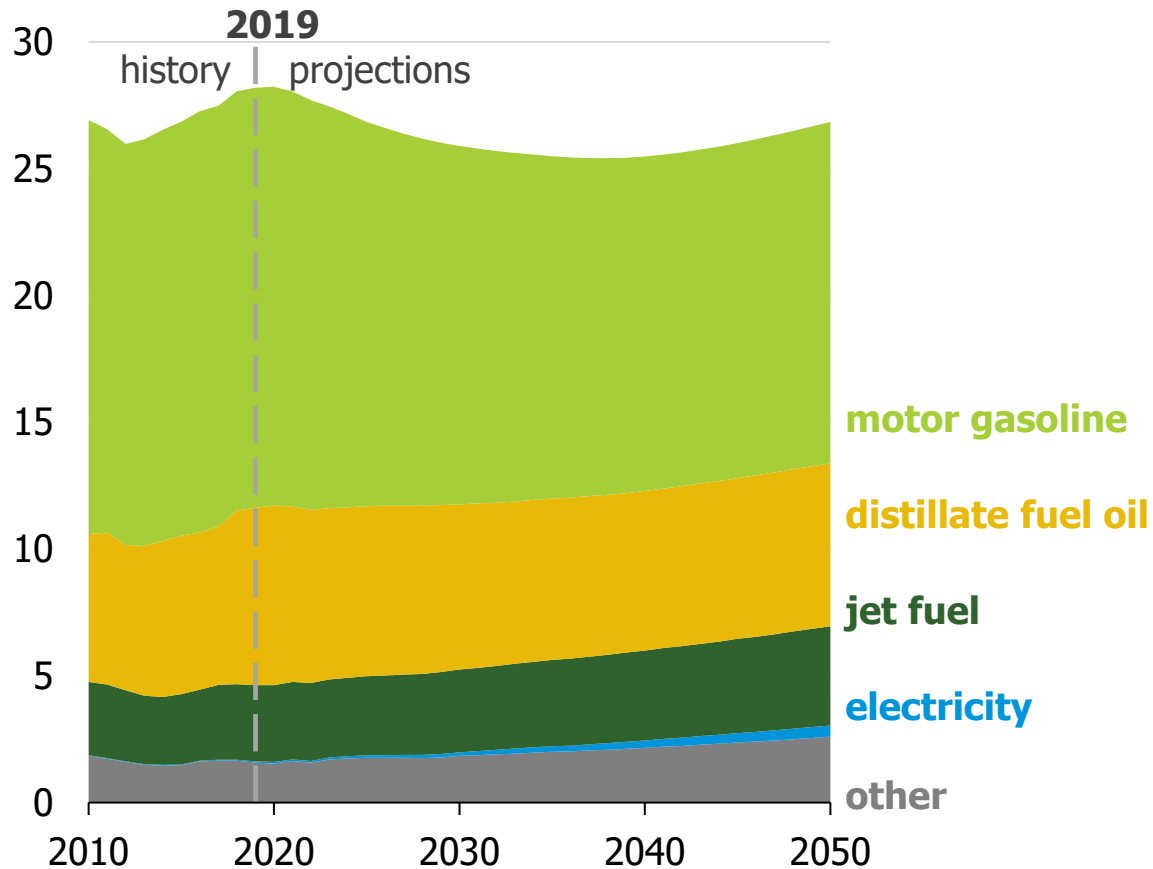
(1) Source: BP Energy Outlook 2020. Reflects Business-as-usual scenario.

(2) Based on BP Energy Outlook 2020. Net Zero scenario assumes that global carbon emissions fall by over 95% by 2050 broadly in line with a range of scenarios limiting temperature rise to 1.5 degrees Celsius. Net Zero assumes EV adoption rate of 80%+ and renewable energy share of ~59% by 2050E. Based on Project Net-Zero 1 planned capacity.

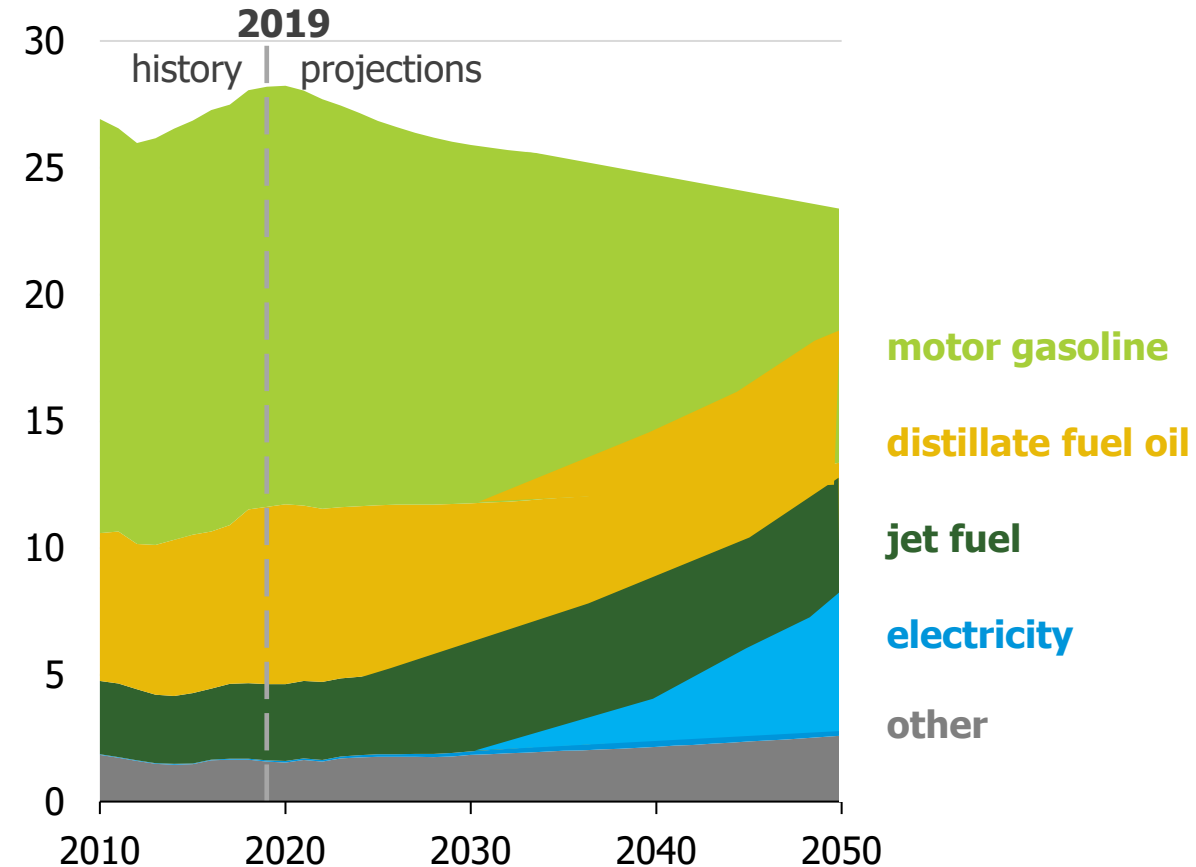


# LIQUID FUELS ARE IN OUR FUTURE...THE QUESTION IS HOW MUCH?

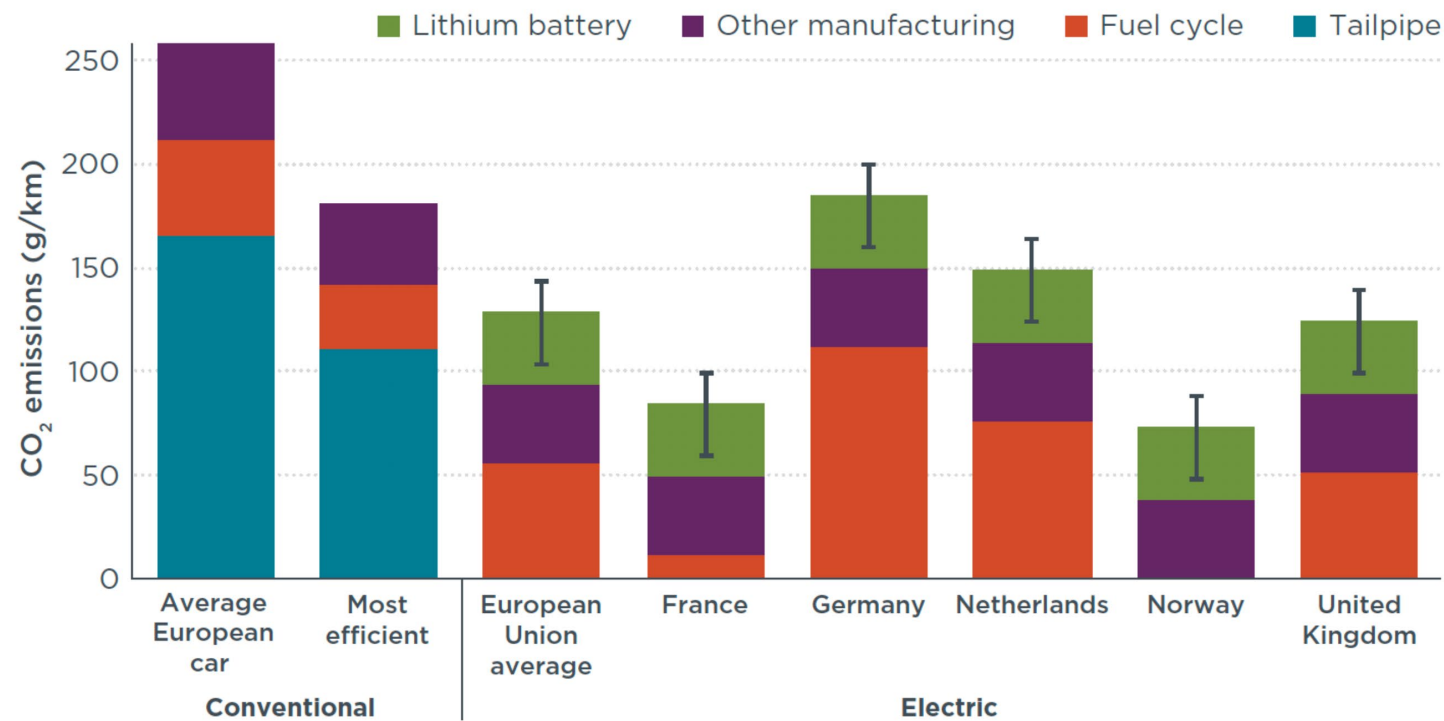
**Current EIA Projection of  
Transportation sector consumption (by fuel)**  
quadrillion British thermal units



**Hypothetical Projection Assuming  
Significant Penetration Of Electrification\***  
quadrillion British thermal units

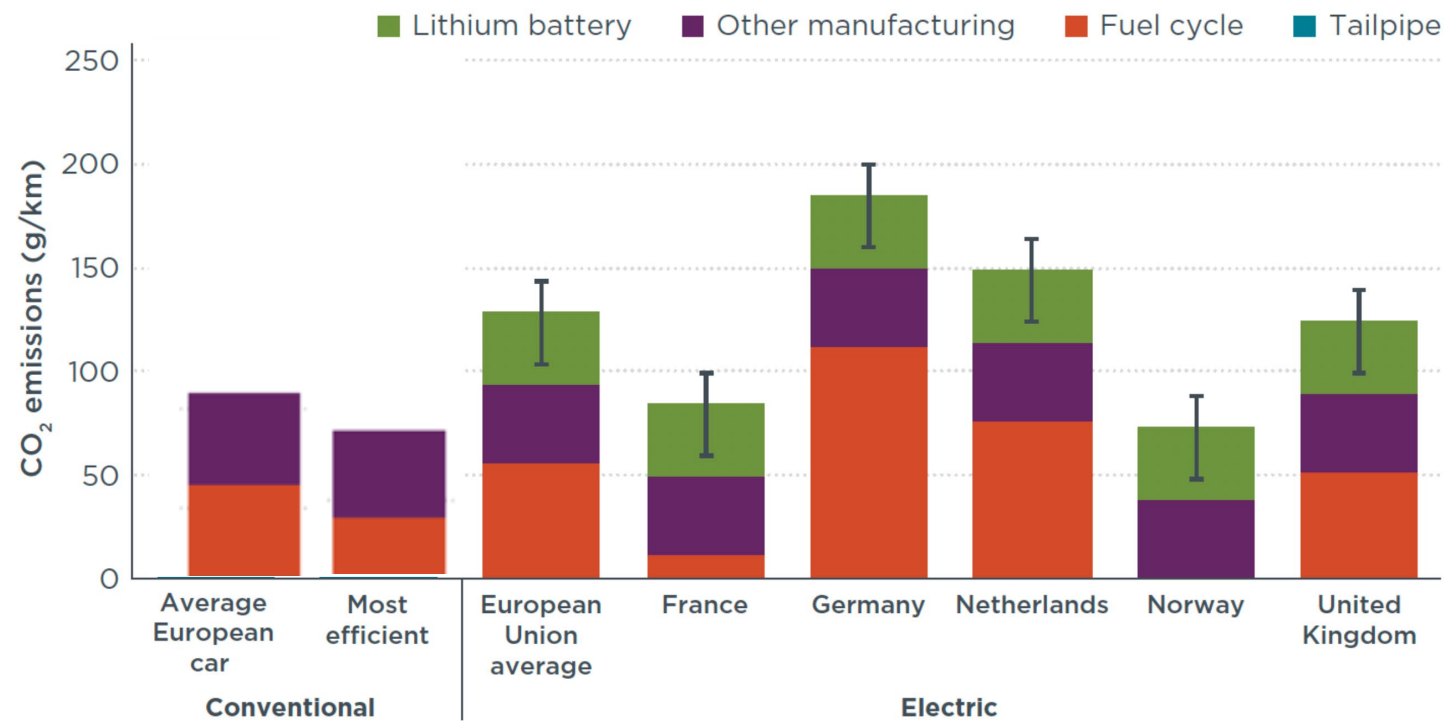


# THINKING ABOUT CARS: WHAT IF WE COULD ELIMINATE THE TAILPIPE EMISSIONS OF CARS ON A FULL LIFE CYCLE BASIS?



**Figure 1.** Life-cycle emissions (over 150,000 km) of electric and conventional vehicles in Europe in 2015.

# IF WE USE A NET-ZERO FUEL, IT'S CONCEIVABLE!

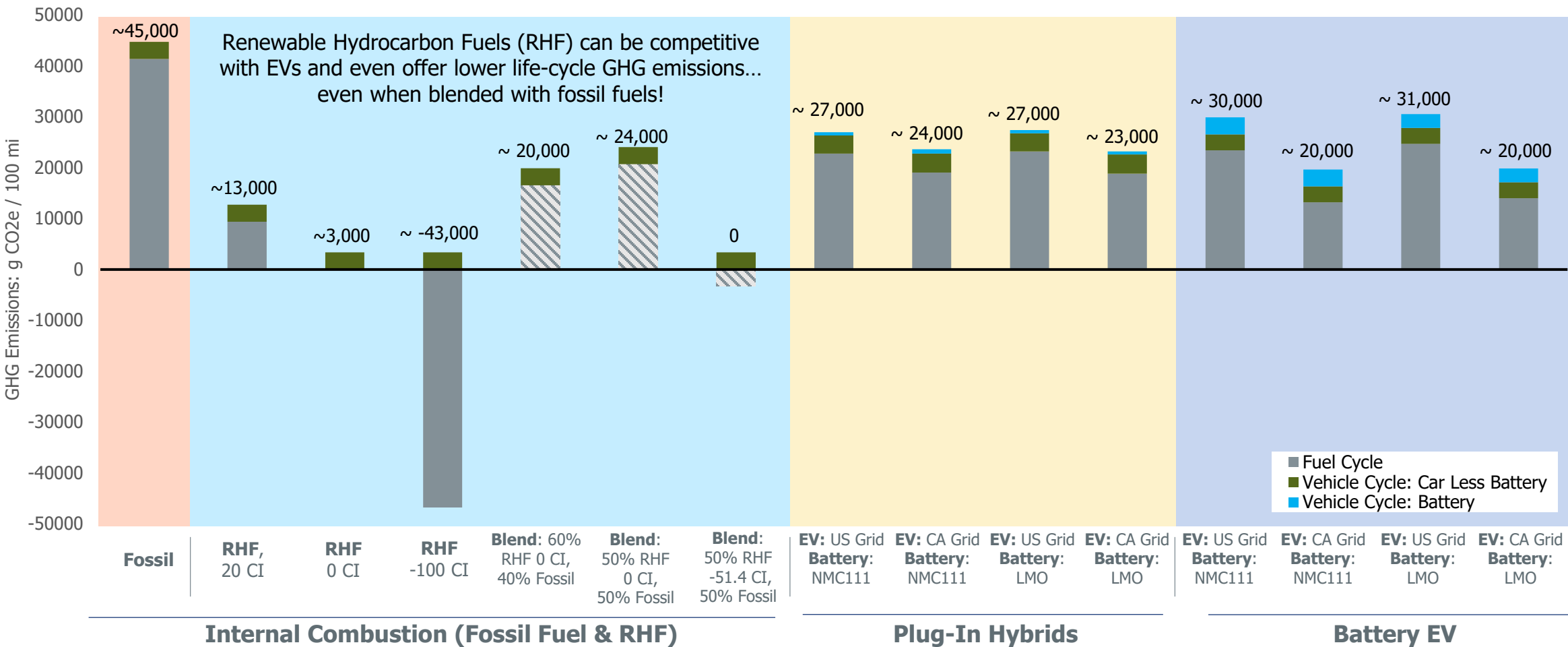


Source: Adapted from ICCT, "Effects of battery manufacturing on electric vehicle life-cycle greenhouse gas emissions", Feb 2018 by eliminating the tailpipe GHG emissions to make a point.

# LOW-CARBON AND CARBON NEGATIVE FUELS HAVE POTENTIAL TO REDUCE GHG'S AS MUCH AS, OR MORE THAN ELECTRIC VEHICLES—*IF THEY ARE DONE THE RIGHT WAY*

## Life-Cycle Emissions Estimates Per 100 Miles

Comparison of Vehicle Emissions (g CO<sub>2</sub>e / 100 mi)<sup>1</sup>

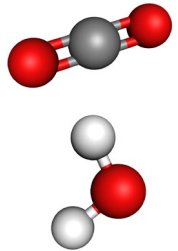


**Source:** J.B. Dunn, L. Gaines, J. C. Kelly, C. James, C., and K. G. Gallagher, "The Significance of Li-ion Batteries in Electric Vehicle Life-Cycle Energy and Emissions and Recycling's Role in Its Reduction," energy and Environmental Sciences, 2015, as updated by the authors using the most recent U.S. DOE, Argonne National Laboratory, GREET Model, 2018, <https://greet.es.anl.gov>

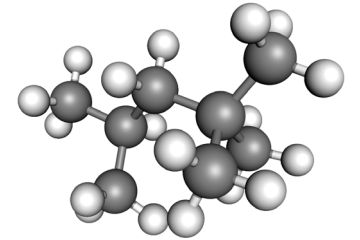
**Notes:** Global warming potential measured in grams carbon dioxide equivalent emissions per vehicle kilometer traveled averaged over the lifetime of the vehicle; model year 2012 internal combustion engine vehicle (ICEV); 2012 plug-in hybrid electric vehicle; 2012 battery electric vehicle (BEV); US electricity grid, 2017 average; California electricity grid, 2017 average, lithium-ion battery with LiNi<sub>0.4</sub>Co<sub>0.2</sub>Mn<sub>0.4</sub>O<sub>2</sub> cathode materials paired with graphite anodes (NMC111); lithium-ion battery with a LiMn<sub>2</sub>O<sub>4</sub> cathode material paired with graphite anodes (LMO). Unit conversions performed by Gevo. Gevo scenarios assume RHF fuel used with standard ICEV. Gevo calculations used for RHF scenarios assuming given CI scores.

# BURNING OF FOSSIL FUEL RELEASES FOSSIL CARBON

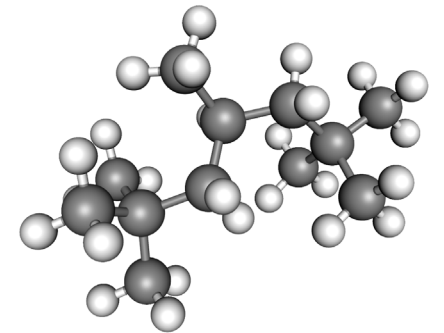
**Liquid Hydrocarbons are a Terrific Energy Carrier; Infrastructure Already Exists**



Carbon Dioxide  
Water



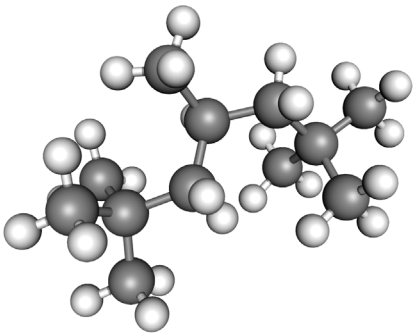
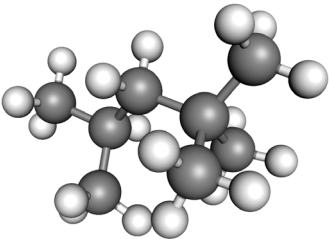
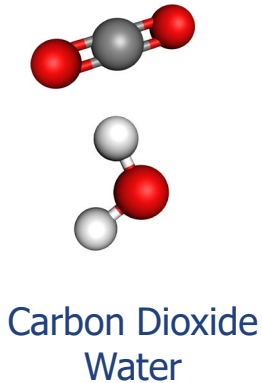
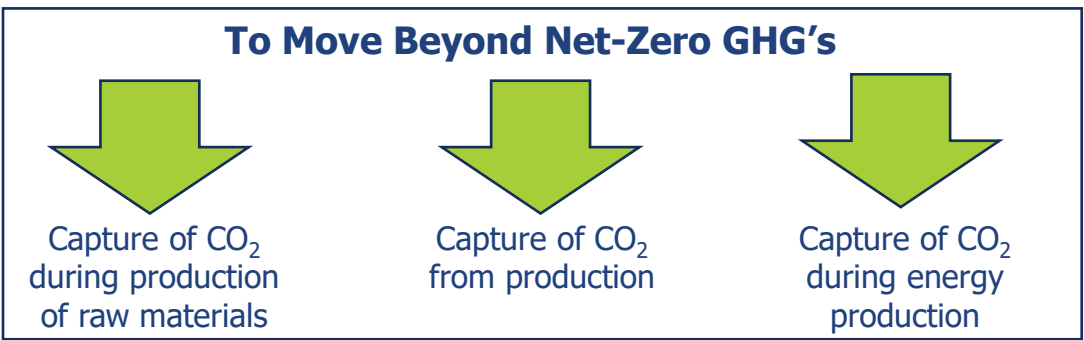
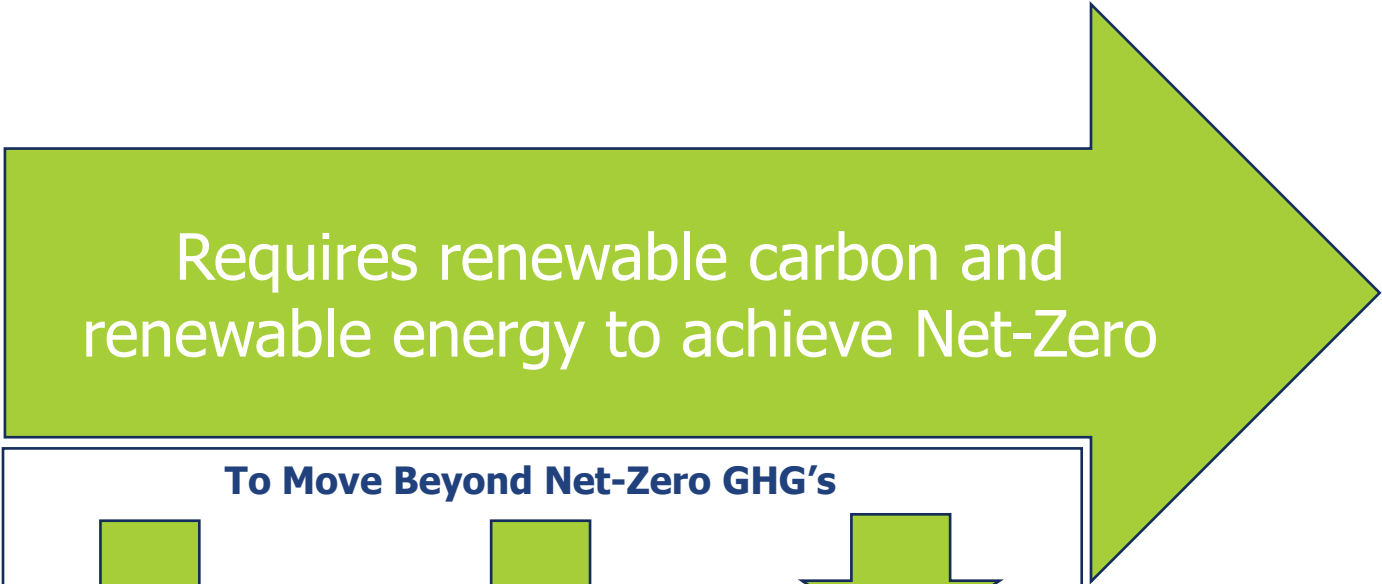
Isooctane (gasoline)



Jet Fuels

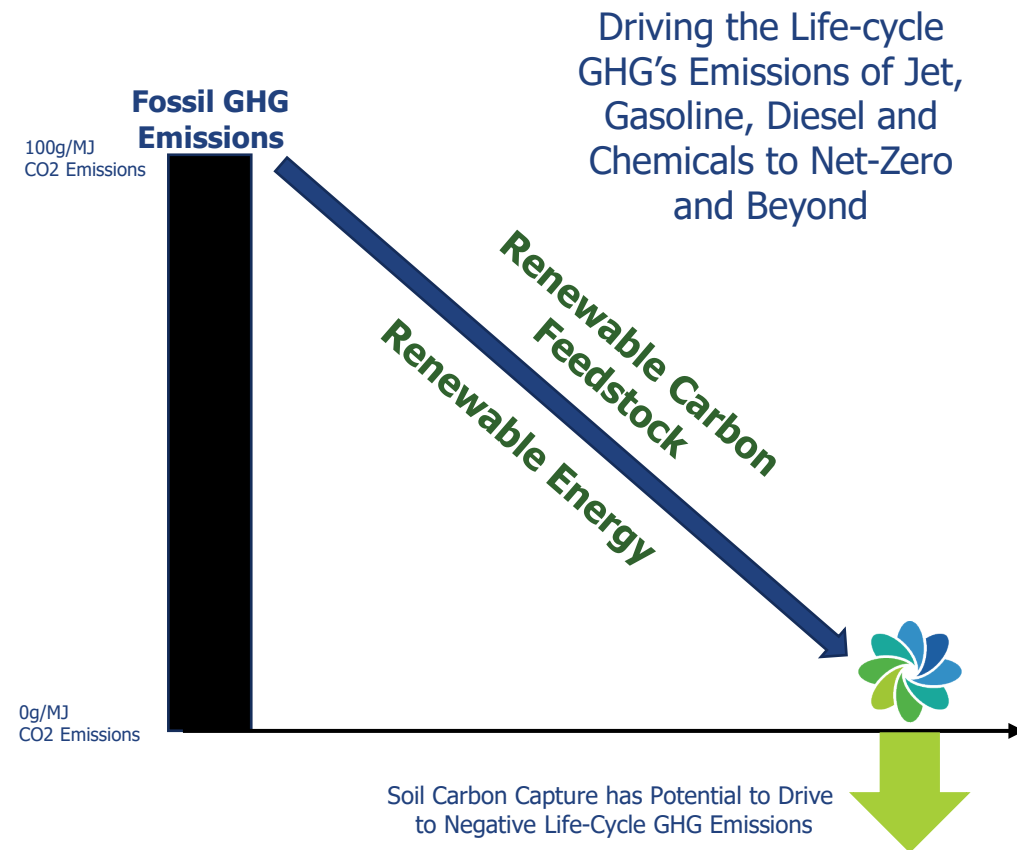
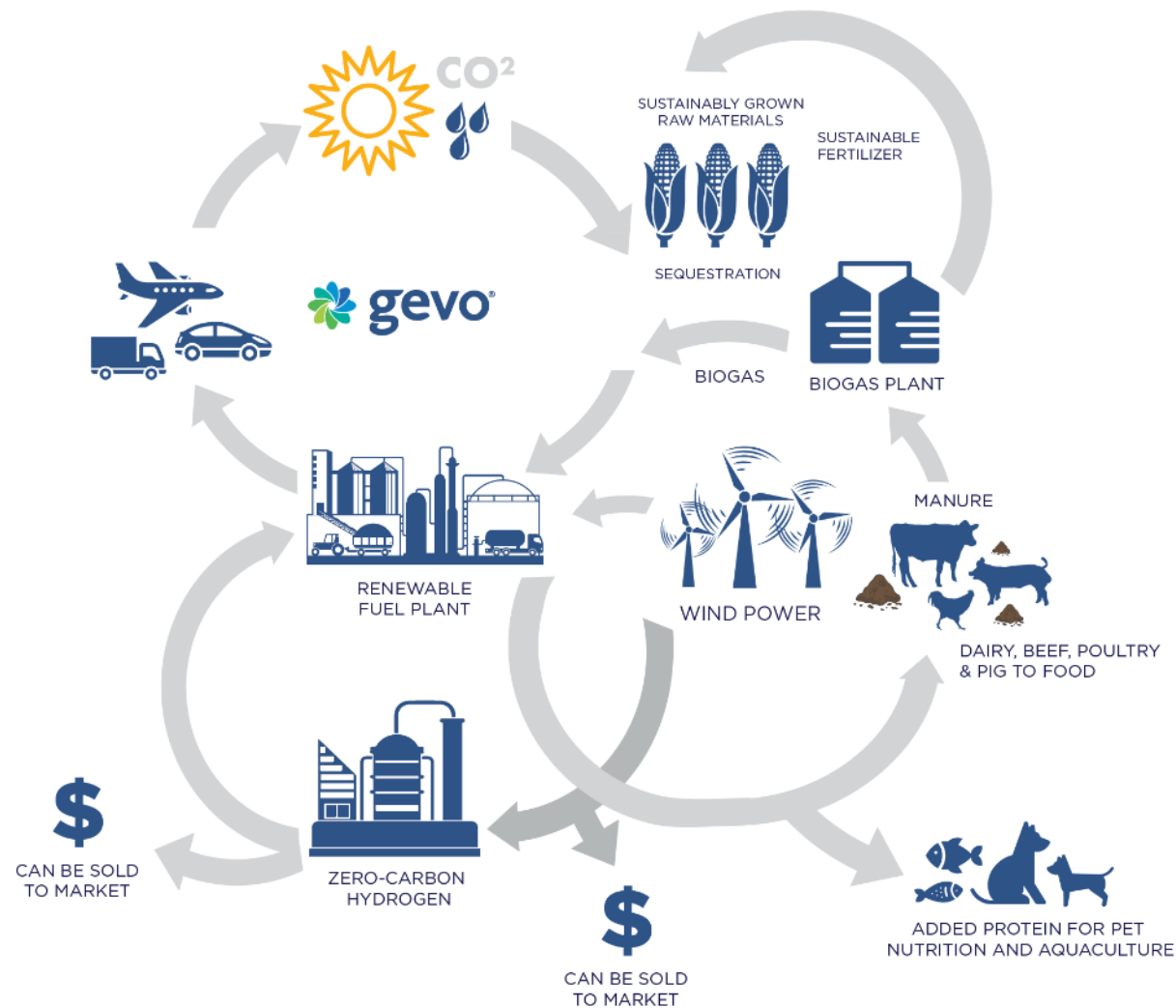


# MOVING BEYOND NET-ZERO: SEQUESTRATION OF CARBON



# ELIMINATE FOSSIL BASED ENERGY AND CAPTURE RENEWABLE CARBON

GEVO'S BUSINESS SYSTEMS, FROM RAW MATERIALS TO RENEWABLE FUELS, EXEMPLIFIES THE CIRCULAR ECONOMY IN ACTION



# GEVO & WHAT WE DO



# CHANGING WHAT IS POSSIBLE: CREATING A LOW-CARBON FUTURE

## RENEWABLE ENERGY *TRANSFORMED*



## DECARBONIZATION OF FOOD, FUELS, CHEMICALS AND MATERIALS

- We transform renewable energy sources into a “drop in” fungible commodity (liquid hydrocarbons) that can be easily stored and transported globally
- We pay attention to the full business system, from capture of carbon, through protein production, through hydrocarbon production, to our sources of renewable energy, to our products fate in the marketplace
- We are developers of, and investors in: biogas, wind electricity, in addition to hydrocarbons

# WE NEED TO GROW PRODUCTION CAPACITY

## NASDAQ: GEVO

- Corporate headquarters (office and labs) in Englewood, CO. ~
- Net-Zero1 facility in Lake Preston, SD <sup>(4)</sup> is being designed to produce
  - ~300mmlbs of protein products
  - ~30mmlbs of corn oil
  - ~45 MGPY of renewable jet fuel and gasoline products from waste carbohydrate streams
- Commercial scale fermenter in Luverne, MN with 1.5 mmgpy capacity<sup>(1)</sup> (plus animal feed and corn oil co-products)
- Low-carbon jet fuel and gasoline production facility in Silsbee, TX<sup>(2)</sup> with 100,000 gpy capacity<sup>(3)</sup>

## Selected Customers / Partners



**Used on commercial flights:** Gevo jet fuel has had ASTM approval since 2016

**Renewable gasoline:** Currently used by high-end racing



(1) Represents isobutanol production from corn waste / residue.  
(2) Gevo does not own the Silsbee facility. Operated in partnership with South Hampton Resources, Inc. In 2018, facility was successfully scaled up to double its capacity.  
(3) Represents jet fuel and gasoline production from Isobutanol.  
(4) Scheduled to break ground 2022



## KEY INFORMATION

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**Cash**

~\$525 million (3/31/2021)

**Debt**

No material debt outstanding

**Common Shares Outstanding**

~198 million (3/31/2021)

# HIGH-VALUE PROTEIN, DROP-IN GASOLINE, JET FUEL, AND OTHER HYDROCARBONS WITH NET-ZERO GHG EMISSIONS WHEN BURNED

## Raw Materials



Most carbohydrate-based raw material can work

### High-value Protein (Pet Nutrition/Aquaculture)<sup>(1)</sup> & Oil



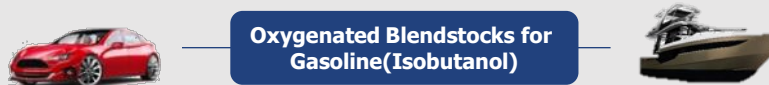
### Jet Fuel



### Renewable Premium Gasoline (Isooctane)<sup>(2)</sup>



### Oxygenated Blendstocks for Gasoline (Isobutanol)



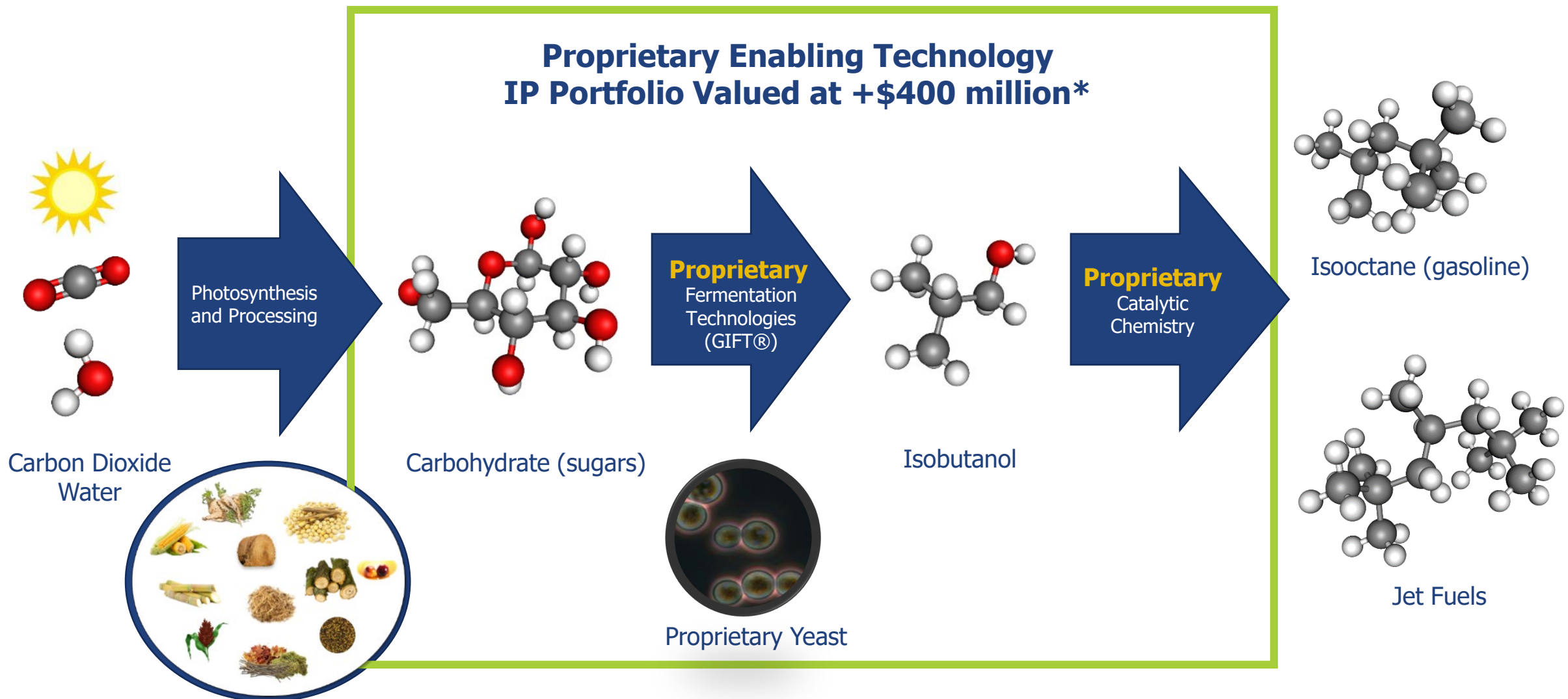
### Diesel (Future Intent)



- **Proven technology in production and product use**
- The value of carbon can now be priced
- We believe we have customer demand to require multiple large plants
- We are using a Take-or-Pay contract approach, successfully, with customers

(1) Added to end products  
(2) Certain regulatory approvals required in some jurisdictions.

# HOW WE DO THE "REVERSE OF BURNING" IN A SUSTAINABLE SYSTEM



\*Estimated Value of IP by Peak Value IP LLC, August 2020

# IMPROVING AGRICULTURE & PUTTING NUTRITION INTO THE FOOD CHAIN

## Sustainable Agriculture Sparks the Whole Circular Economy

- **Nutrition first**, Gevo will produce more protein products than fuel products based on tonnage!
- **Help farmers succeed**, growing their operations and employing more people
- **Better economic conditions** help rural communities thrive
- **Farms participate in growth** of renewable energy infrastructure
- **Every acre produces** both food and fuel



Improved Yield



Protein Captured Without Starch



Protein for Pet Nutrition, Aquaculture & Animal Feed

# Market and Business Development





# DEMAND IS INCREASING: WE BETTER THINK BIGGER, SOONER

## Attractive Contract Portfolio

### ✓ Large, Growing Portfolio

- Over \$1.6 billion<sup>(1)</sup> in take-or-pay contracts in place
- Additional ~\$13.4 billion<sup>(2)</sup> actively being discussed or negotiated with high-quality customers

### ✓ Long-Term: Majority of contracts have 6–7 year terms once the production facility begins production

### ✓ Take-or-Pay: ~52 of 54 MMGPY currently contracted is take-or-pay; additional ~497 MMGPY in contract development pipeline

### ✓ Fixed Price: Common for the contracts to contain fixed price components in overall pricing structure

## Market Traction

**45 MMGPY**

Planned Capacity of  
Single Gevo  
Renewable Fuels  
Plant<sup>(4)</sup>

**54 MMGPY**

Total Volumes  
Currently  
Contracted

**497 MMGPY**

Total Volumes in  
Contract  
Development  
Pipeline

**+\$1.6 billion**  
**Take-or-Pay offtake**  
*(signed)<sup>(1)</sup>*

**~\$13.4 billion**  
**Take-or-Pay Offtake**  
*(negotiations and  
discussions)<sup>(2)</sup>*

**Other Off-Takes<sup>(3)</sup>**

**Gasoline**



TRAFIGURA

**Global  
Companies**



**Jet Fuel**



**Global  
Companies**



(1) The estimate is based on certain revenue assumptions in the contracts, including the value of certain environmental credits and the sales price of the fuel. This estimate represents the revenue over the entire term of the contracts.  
(2) Calculated as in (1) and represents an estimate of potential outcomes depending on discussions and negotiations. There can be no guarantee that any of these contracts get executed and close. They are being discussed and/or negotiated.  
(3) Includes distributors and end customers.  
(4) Based on Project Net-Zero 1.

# SUSTAINABLE AVIATION FUEL (SAF): TRUE DROP IN, BUT WITH IMPROVED PROPERTIES

## Gevo has a good solution

- Lower freezing point than petro-jet
- Higher energy density than petro-jet
- Very low sulfur means lower sulphur oxides (SO<sub>x</sub>)
- SAF energy density is higher than petro-jet with the potential for **more miles per gallon of fuel, or more weight might be carried by a plane.**



# RENEWABLE GASOLINE: REDUCING AND/OR ELIMINATING THE GHG FOOTPRINT **AND** IMPROVING PERFORMANCE

A drop-in<sup>(1)</sup>, octane hydrocarbon gasoline product that:

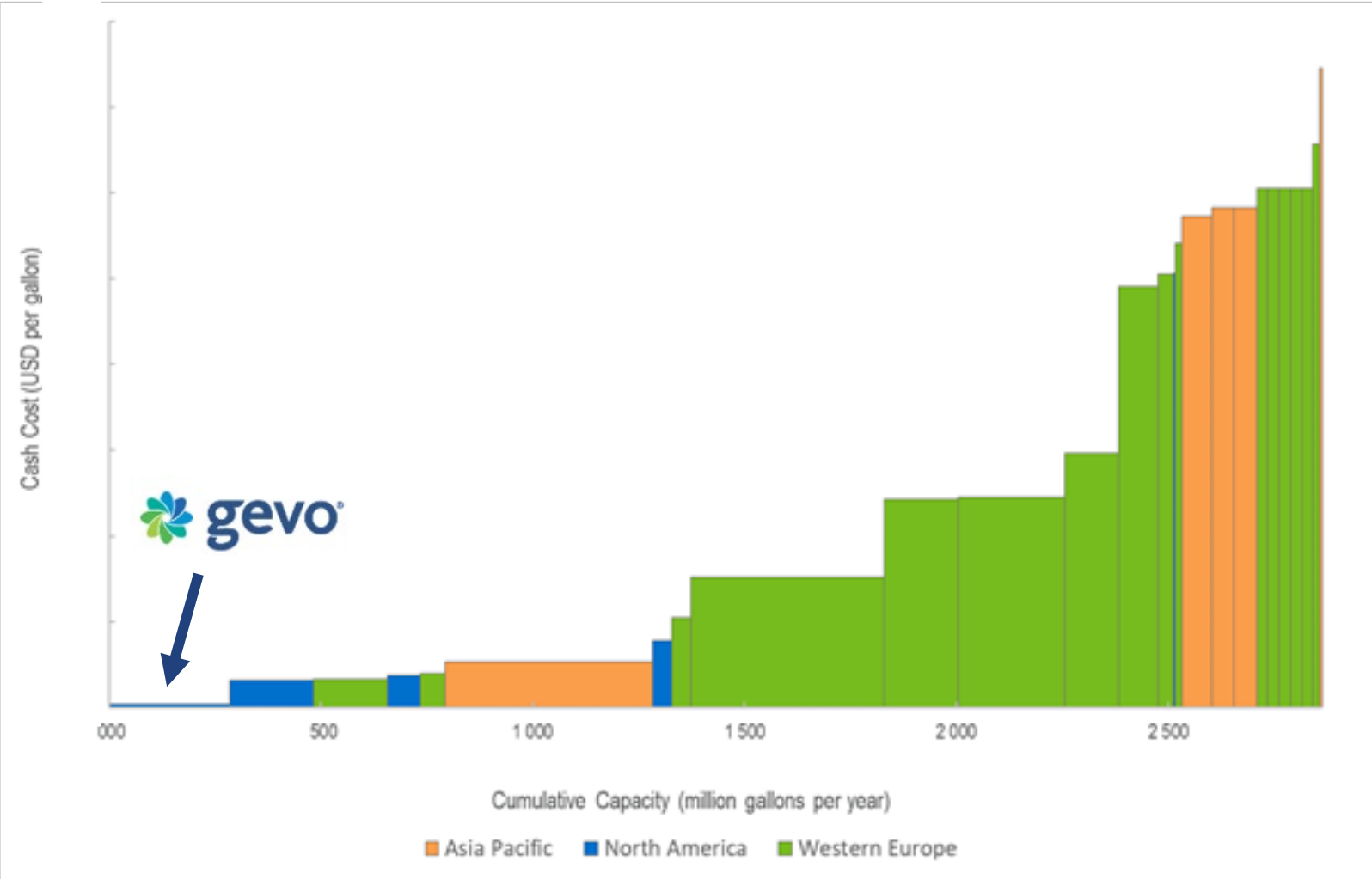
- Can be added directly to fossil gasoline:
  - **Increases octane without decreasing energy per gallon on a blended basis.**
  - The blend would have higher energy with the potential for more miles per gallon.
- Potential to immediately **reduce GHG emissions** simply by dropping it in---**no infrastructure changes needed**
- **Potential exists to replace whole gasoline gallons** when used in combination with products that Gevo or others could make

**Low Carbon**  
**Low Sulfur**  
**Low Nitrogen Oxides (NOx)**  
**Low Particulates**



(1) Certain regulatory approvals required in some jurisdictions.

# RANKING OF **POTENTIAL** SAF SUPPLIERS BY **CASH COST OF PRODUCTION** ACCORDING TO NEXANT (NO CARBON VALUE INCLUDED)



This chart was obtained from a Nexant study commissioned by Gevo to benchmark SAF production costs. Nexant is a company who specializes in analyzing and reporting production cost economics

# NET-ZERO PROJECTS

Production plants that make “net-zero” ghg products





# PROJECT NET-ZERO 1 SUMMARY

GEVO'S FIRST, OF WHAT ITS HOPES, OF MANY NET-ZERO PLANTS



## Site

- Optioned Lake Preston site; site is ~240 acres
- Planned construction start: 1H 2022
- Planned Start-Up: 1H 2024
- [NET ZERO 1 VIDEO](#)



## Production

- Planned production of ~45MMGPY <sup>(1)</sup> of renewable jet fuel and gasoline (we can vary the output mix) from agricultural residue, plus
- ~300MMlbs of high-value protein products
- ~30MMlbs of corn oil products



## Overview

- Capacity is sold out under take-or-pay contracts
- Project level financing: Projected IRR of 20% or more and Project level EBITDA of +\$100M/yr<sup>(3)</sup>
- Fuel products are expected to achieve a net-zero GHG footprint across the whole life cycle<sup>(2)</sup>
- Residual starch, left over from protein and corn oil production is the feedstock.
- 100% of the thermal demand for boilers expected to be met with biogas generated on-site from a wastewater treatment plant
- Behind-the-Meter renewable wind power expected to be used for electricity needs
- Green Hydrogen is expected to be made from water and renewable electricity

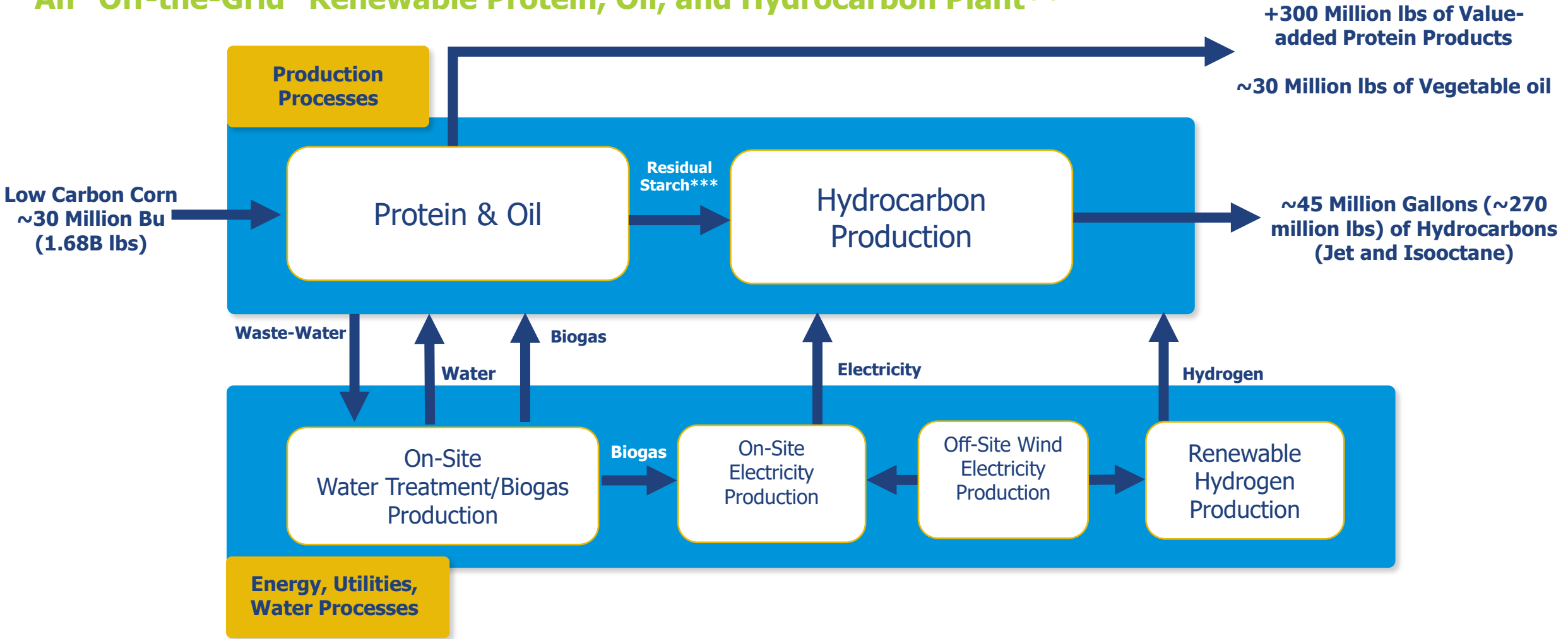
(1) The gasoline product produced would be isooctane, the premium component of gasoline. Certain regulatory approvals required in some jurisdictions for premium gasoline product.

(2) Based on full cradle-to-cradle analysis using Argonne National Laboratories GREET model. Includes agricultural practices, energy sources, supply chain, and end fate of product.

(3) Based on current economic and capital projections which are subject to change in the future because of new information related to capital costs, production costs, macro markets, government policy changes, or such other factors.

# SCOPE OF NET-ZERO 1\*

## An “Off-the-Grid” Renewable Protein, Oil, and Hydrocarbon Plant\*\*



\*Currently Planned for Lake Preston, volumes of inputs and products are subject to change.\*\*The plant would be connected to the grid to supply energy to the grids, and also to take energy from the grids if needed. The plant is being designed to be self sufficient for its energy between what can generated on-ste and from the planned off-site wind farm. Gevo may also bring RNG to the plant from its RNG project.

\*\*\* Also known as a Starch Slurry

# Lake Preston and NZ1

## Status

- Development costs fully funded
- Construction equity fully funded
- Capacity fully sold-out using take-or-pay contracts
- EPC firm engaged in front-end engineering and design

**The NZ1 construction is expected to employ ~1000 people**

**The permanent regional employment impact is estimate to be over 900 jobs (~70 FTEs on site)**

**Regional economic output impact is estimated to be >\$300 Million per year**

## Lake Preston, South Dakota



## Greenfield Site (Lake Preston, SD)\*



\*Site overlay not to scale and subject to change.

Gevo assessment of operating period economic impact is based on Net Zero 1 operating projections and the Bureau of Economic Analysis' Kingsbury County, South Dakota RIMS2 Multipliers - 2018 Data. The impacts include initial impact and indirect and induced effects of economic activity, as captured by the RIMS2 multipliers. Construction period employment is an estimate of direct jobs and Gevo has not assessed potential indirect and induced effects of construction on the region.

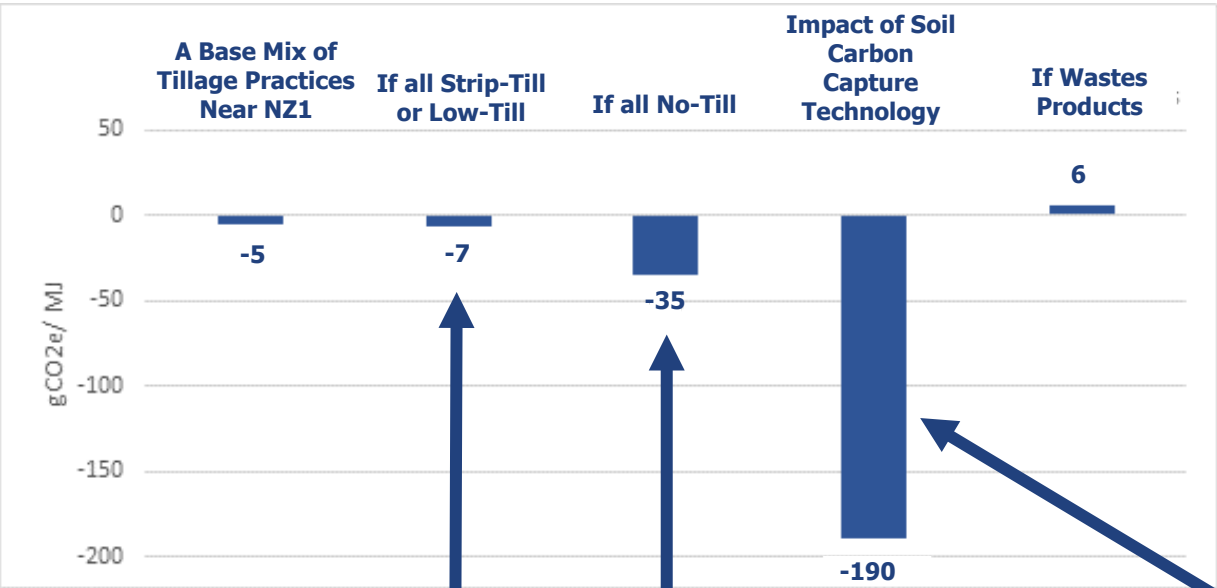
Work with Farmers, Eliminate the Fossil Emissions,  
Capture Carbon, Drive the GHG Footprint Down



# GOING BEYOND NET-ZERO: CAPTURING CARBON IN THE SOIL

SUSTAINABLE AGRICULTURE OFFERS POTENTIAL UPSIDE IN COMBINATION OF RENEWABLE ENERGY IN PRODUCTION

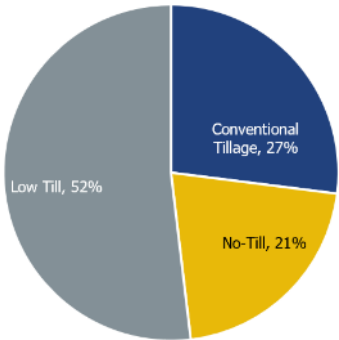
## Impact of Agricultural Practice on Total Life-Cycle GHG Emissions for Hydrocarbons Burned for Transportation Energy <sup>(1)</sup>



**Agriculture improvements are practical and being done**

- Sequester carbon in the soil
- Higher yield
- Less inputs

### Tillage Practices Near Net-Zero 1 Site <sup>(2)</sup>

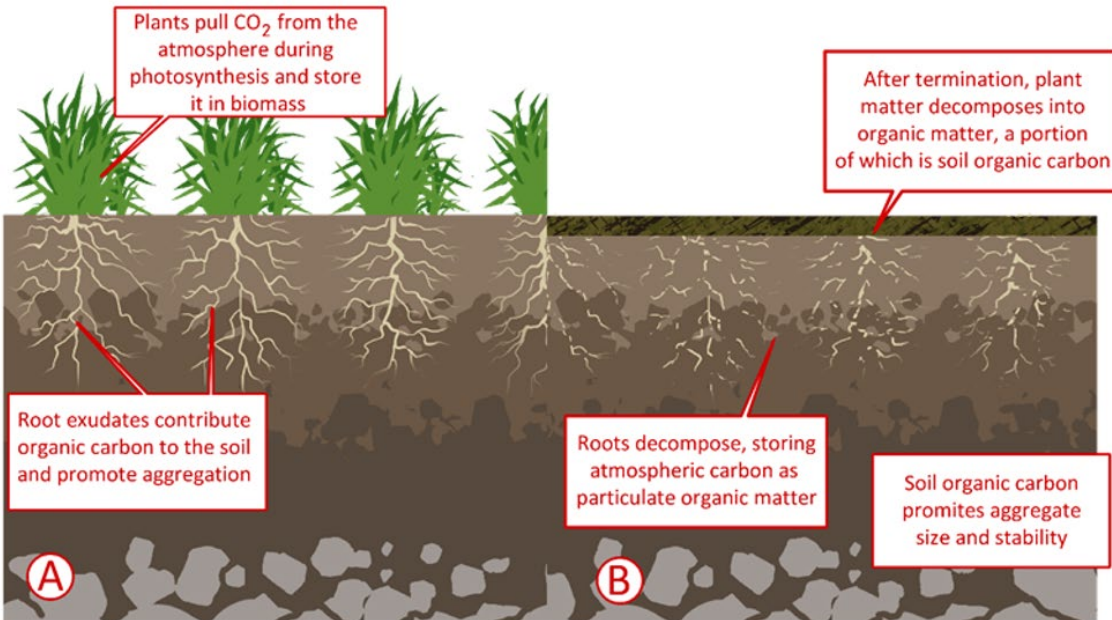


Based on data and trials by LOCUS, a company who believe soil organic carbon (SOC) can be dramatically increased by building root systems and other soil amendments. If true, the amount of carbon capture per gallon could be in the 10's of kgs per gallon. We are working with them and other companies to figure it out.

(1) EcoEngineers is in process of a detailed review and analysis.  
(2) EcoEngineers, USDA – NRCS 2019 South Dakota Cropping Systems Inventory Report.



# DONE RIGHT, GROWING PLANTS PUTS CARBON FROM THE AIR INTO THE SOIL



## New Technology Potential





# GEVO GLOBAL CERTIFICATIONS – FARM CERTIFICATIONS

## RSB



RSB certifies that Gevo adheres to the United Nation’s 12 Principles:

Principle 1 Legality	Principle 2 Planning, Monitoring & Continuous Improvement	Principle 3 Greenhouse Gas Emissions	Principle 4 Human & Labour Rights	Principle 5 Rural and Social Development	Principle 6 Local Food Security
Principle 7 Conservation	Principle 8 Soil	Principle 9 Water	Principle 10 Air Quality	Principle 11 Use of Technology, Inputs & Management of Waste	Principle 12 Land Rights

## ISCC



ISCC PLUS certification enables Gevo to validate the responsible nature of its liquid transportation fuels and to highlight the traceability, qualifying that such fuels are produced in a sustainable manner


### ISCC principles:

- Principle 1:** Protection of biodiverse. and carbon rich areas.
- Principle 4:** Compliance with Human, Labor and Land rights.
- Principle 5:** Compliance with Laws and. International Treaties.
- Principle 6:** Good Management. Practices and Continuous Improvement.


# TRACKING CARBON AND SUSTAINABILITY ACROSS THE BUSINESS SYSTEM




Gevo is partnering with Blocksize Capital to establish a **blockchain** technology for tracking sustainability, building trust and setting the highest standards for the industry




Savings due to digitalization & automation



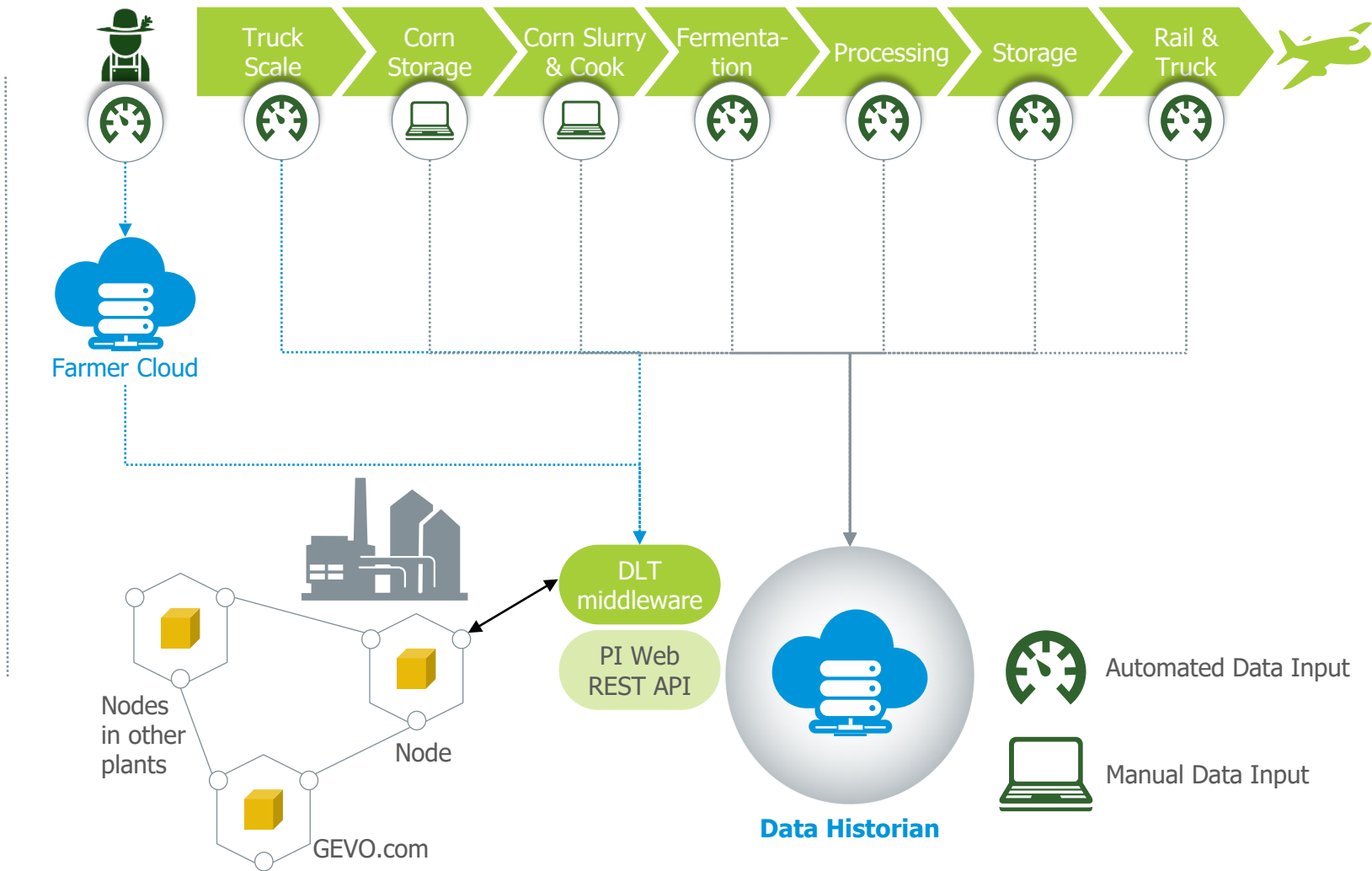
Encoded Data



Tamper-proof

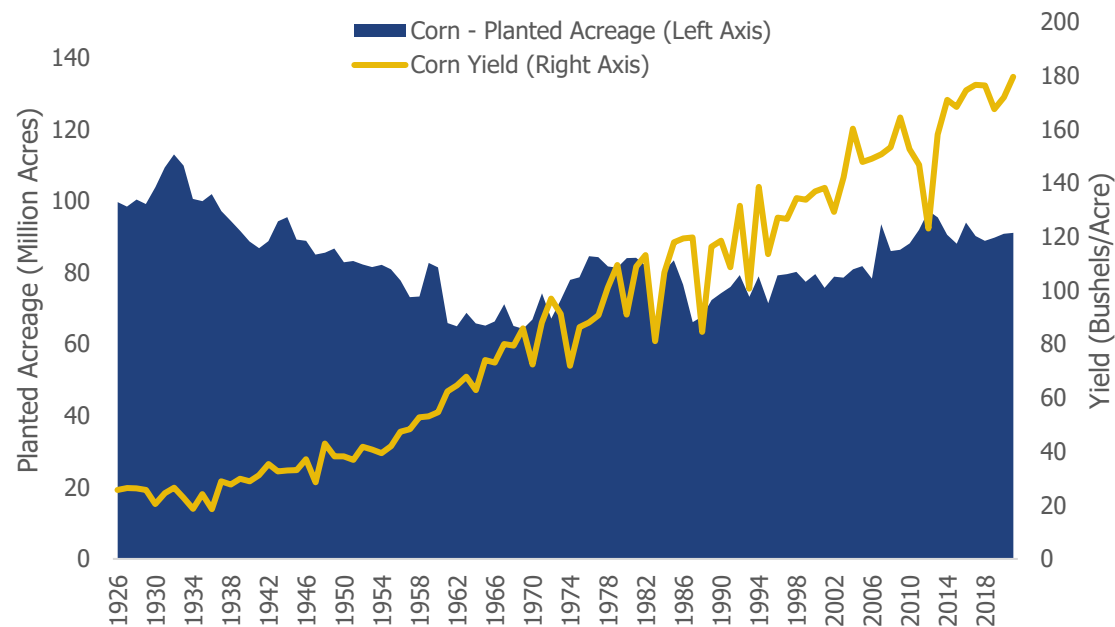


Avoid Greenwashing and Double Counting

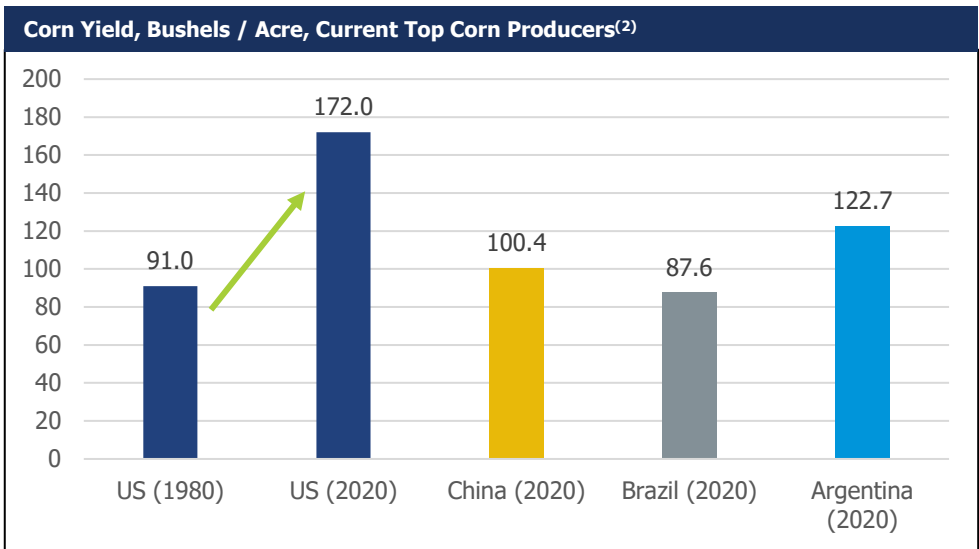


# WE SHOULD IMPROVE AGRICULTURE, GENERATE MORE PROTEIN AND CAPTURE SOIL CARBON, WHILE IMPROVING OVERALL SUSTAINABILITY

## Land Use Has Stayed Relatively Stable, While Yields have Dramatically Improved<sup>1</sup>



## Improving Global Yields Will Enable Corn to Address Food and Energy Demands



## Corn Produces Large Quantities of Protein, Oil, and Residual Starch<sup>3</sup>

	Bu/Acre	lbs Protein/Acre	lbs Oil/Acre	Residual Starch/Acre
Corn (56lb/Bu)	180	893	449	6,346
Soybeans (60lb/Bu)	51	1,057	555	-

Technology transfer can help accelerate yield growth in other countries: top producer yields stand where the US was 30-40 years ago

(1) USDA Feed Grains: Yearbook Tables. May 2021. <https://www.ers.usda.gov/data-products/feed-grains-database/feed-grains-yearbook-tables/> (2) US 1980 data from FAOSTAT, US 2020 from USDA Crop Production Annual Summary, Others from USDA Foreign Agricultural Service (3) USDA Feed Grains: Yearbook Tables. May 2021. <https://www.ers.usda.gov/data-products/feed-grains-database/feed-grains-yearbook-tables/> and USDA Oil Crops Outlook. May 2021. <https://www.ers.usda.gov/publications/pub-details?pubid=101170> 2021/2022 Marketing Year Estimates used. Nutrient composition data derived from USDA Food Composition tables and adjusted for standard commodity moisture levels. US Department of Agriculture, Agricultural Research Service, Nutrient Data Laboratory. USDA National Nutrient Database for Standard Reference, Release 28. Version Current: September 2015, slightly revised May 2016. Internet: <https://www.ars.usda.gov/Services/docs.htm?docid=8964>. Residual starch represented by carbohydrates ex fiber.

Creating Optionality, and Profit with RNG





# GEVO NW IOWA RENEWABLE NATURAL GAS FACILITY

## Description

- 355,000 MMBtu/yr RNG
- ~\$70mm capex
- +30% LIRR<sup>(1)</sup>
- Multiple dairy farms with over 20,000 milking cows combined
- Gas upgrading system to be located adjacent to Northern Natural Gas pipeline
- Sell RNG to LCFS market *and to augment Gevo renewable fuels production*

## Status

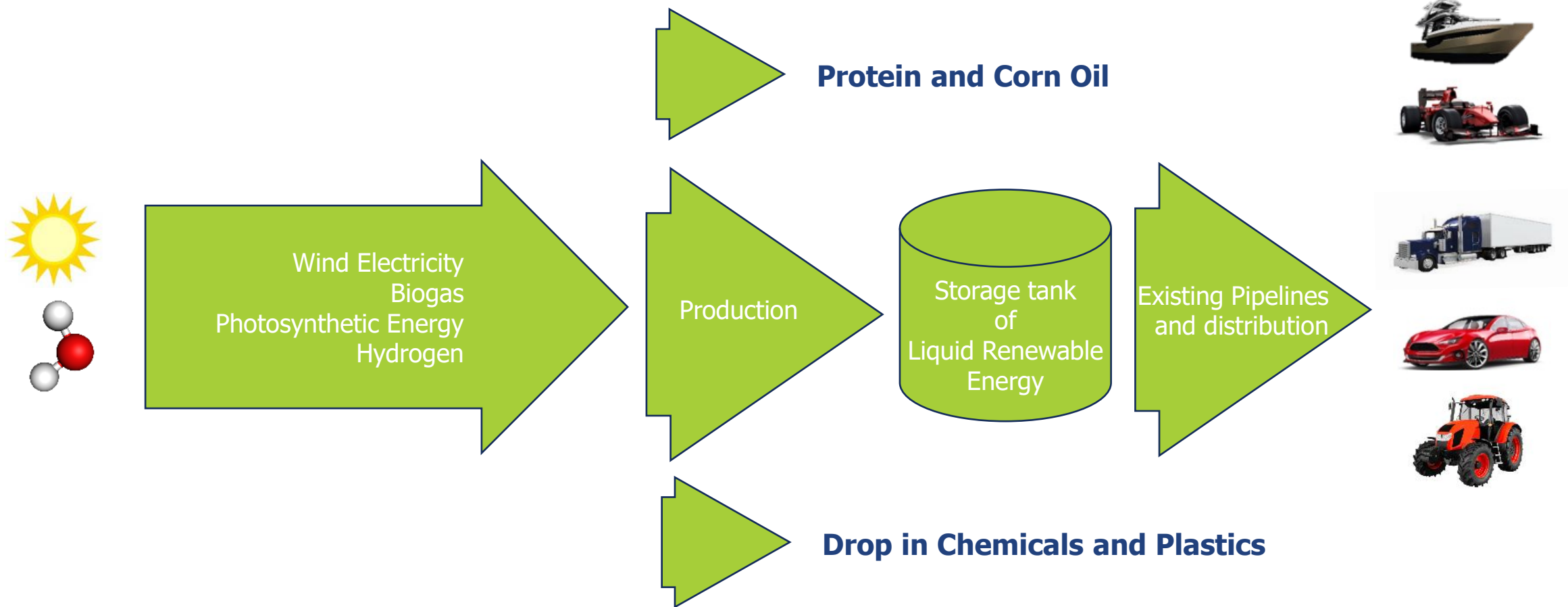
- ✓ Under Construction
- ✓ Start-up expected in early 2022



(1) Projected project-level leveraged internal rate of return based on project financing structure and assumptions around offtake contract pricing, number of cows producing manure, carbon value, capital costs, and operating costs, all of which are subject to change and revisions. The returns assume that at least 50% of the RNG is sold into CA for transportation use.

# RENEWABLE ENERGY AND CARBON TRANSFORMED TO DROP-INS

**Easy to Store, Easy to Use, Drop-in, Works with Existing Infrastructure, Fleets, Chemical Processing and Plastics Production**





## FOR ADDITIONAL INFORMATION ABOUT GEVO

**These short videos explain more about Gevo, our process, business system, and how we think about sustainability**

NET ZERO 1 (1:52): <https://vimeo.com/540736374>

Gevo – Solving Energy (2:00): <https://vimeo.com/531083659>

Working Toward Zero Carbon Footprint (2:46): <https://vimeo.com/440219829>

Food and Fuel (1:19): <https://vimeo.com/440220247>

Where we are so far (1:21): <https://vimeo.com/416215170>

Our Process (1:01): <https://vimeo.com/416215010>

Replacing Fossil Based Carbon (2:07): <https://vimeo.com/396232536>

Farming Carbon & Soil Conservation (1:54): <https://vimeo.com/379773448>

Sustainable Jet Fuel (1:59): <https://vimeo.com/379896308>

Partners with Mother Nature (1:49): <https://vimeo.com/416215170>

Going After the Whole Gallon(0:50): <https://vimeo.com/451342705>

We are Recycling Carbon (0:45): <https://vimeo.com/451341985>

Our Circular Economy (0:48): <https://vimeo.com/451341499>

[www.gevo.com](http://www.gevo.com)





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## APPENDIX

## FORECAST CITATIONS: GLOBAL FORECASTS

- IEA	- IEA (2020), World Energy Outlook 2020, IEA, Paris <a href="https://www.iea.org/reports/world-energy-outlook-2020">https://www.iea.org/reports/world-energy-outlook-2020</a>
- Exxon	- ExxonMobil. 2019. Outlook for Energy: A Perspective to 2040. <a href="https://corporate.exxonmobil.com/-/media/Global/Files/outlook-for-energy/2019-Outlook-for-Energy_v4.pdf">https://corporate.exxonmobil.com/-/media/Global/Files/outlook-for-energy/2019-Outlook-for-Energy_v4.pdf</a> .
- International Renewable Energy Agency	- IRENA (2019), Global energy transformation: A roadmap to 2050 (2019 edition), International Renewable Energy Agency, Abu Dhabi.
- Bloomberg New Energy Finance	- Bloomberg New Energy Finance. 2020. Electric Vehicle Outlook 2020. <a href="https://about.bnef.com/electric-vehicle-outlook/">https://about.bnef.com/electric-vehicle-outlook/</a> .
- International Council on Clean Transportation	- International Council on Clean Transportation. 2020. Vision 2050. <a href="https://theicct.org/sites/default/files/publications/ICCT_Vision2050_sept2020.pdf">https://theicct.org/sites/default/files/publications/ICCT_Vision2050_sept2020.pdf</a> .
- Shell	- Shell. 2021. The Energy Transformation Scenarios. <a href="http://www.shell.com/transformationscenarios">www.shell.com/transformationscenarios</a> .
- BP	- BP. 2020. Energy Outlook 2020 Edition. <a href="https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/energy-outlook/bp-energy-outlook-2020.pdf">https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/energy-outlook/bp-energy-outlook-2020.pdf</a> .
- DNV-GL	- DNV-GL. 2020. Energy Transition Outlook 2020. <a href="https://eto.dnv.com/2020/#ETO2019-top">https://eto.dnv.com/2020/#ETO2019-top</a> .
- MIT Energy Initiative	- MIT Energy Initiative. 2019. Insights into Future Mobility. Cambridge, MA: MIT Energy Initiative. <a href="http://energy.mit.edu/insightsintofuturemobility">http://energy.mit.edu/insightsintofuturemobility</a> .

## FORECAST CITATIONS: US FORECASTS

- New York Times	<ul style="list-style-type: none"> <li>- Plumer, B., Popovich, N. and Migliozi, B. March 10, 2021. Electric Cars Are Coming. How Long Until They Rule the Road?. <i>The New York Times</i>. <a href="https://www.nytimes.com/interactive/2021/03/10/climate/electric-vehicle-fleet-turnover.html">https://www.nytimes.com/interactive/2021/03/10/climate/electric-vehicle-fleet-turnover.html</a>.</li> <li>- Projections follow fleet turnover model in Alarfaj, A. et al., 2020 Environ. Res. Lett. 15 0940c2. <a href="https://iopscience.iop.org/article/10.1088/1748-9326/ab7c89/pdf">https://iopscience.iop.org/article/10.1088/1748-9326/ab7c89/pdf</a>. Electric vehicle sales projection follow IHS Markit forecasts.</li> </ul>
- Energy Policy Simulator, Energy Innovation LLC	- Energy Policy Simulator. <i>Energy Innovation LLC</i> . Accessed on March 29, 2021. <a href="https://us.energypolicy.solutions/">https://us.energypolicy.solutions/</a> . Simulations used are default scenarios: Business as Usual, US NDC, and 1.5C Pathway.
- Rhodium Group	- Wimberger, E., Houser, T., and Larsen, J. (2021). Closing the Transportation Emissions Gap with Clean Fuels. <a href="https://rhg.com/wp-content/uploads/2021/01/Closing-the-Transportation-Emissions-Gap-with-Clean-Fuels-1.pdf">https://rhg.com/wp-content/uploads/2021/01/Closing-the-Transportation-Emissions-Gap-with-Clean-Fuels-1.pdf</a> .
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- Energy Policy Journal	- Peter Fox-Penner, Will Gorman, Jennifer Hatch, Long-term U.S transportation electricity use considering the effect of autonomous-vehicles: Estimates & policy observations, Energy Policy, Volume 122, 2018, Pages 203-213, ISSN 0301-4215, <a href="https://doi.org/10.1016/j.enpol.2018.07.033">https://doi.org/10.1016/j.enpol.2018.07.033</a> .
- US Energy Information Administration (EIA)	- EIA Annual Energy Outlook 2021. (2021). <a href="https://www.eia.gov/outlooks/aeo/">https://www.eia.gov/outlooks/aeo/</a> . Reference case used for scenario forecasts.