



Beyond Net-Zero

Pat Gruber, CEO

October 2021



FORWARD LOOKING STATEMENTS

Any statements in this presentation about our future expectations, projections, estimates, 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; our financial projections concerning our Net-Zero 1 Project, including, but not limited to, capital costs, project revenue, Project EBITDA, levered internal rates of return and projected cash distributions; the status of the engineering work for our Net-Zero 1 Project; our growth plans and strategies; our technologies; 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 projected revenues or sales; our ability to perform under current or future contracts; our ability to become profitable; our ability to finance our Net-Zero 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 Securities and Exchange Commission. 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.

“Make the World A Better Place By Improving the
Standard of Living For All People”

Whitney McMillan, Chairman of Cargill, 1989 to a group of new employees that included me

Gaining Perspective and Framing the Problem



KEY ISSUES TO CONSIDER

Clean
Water

Sanitation

Food and
Nutrition

Clothing

Human
Health

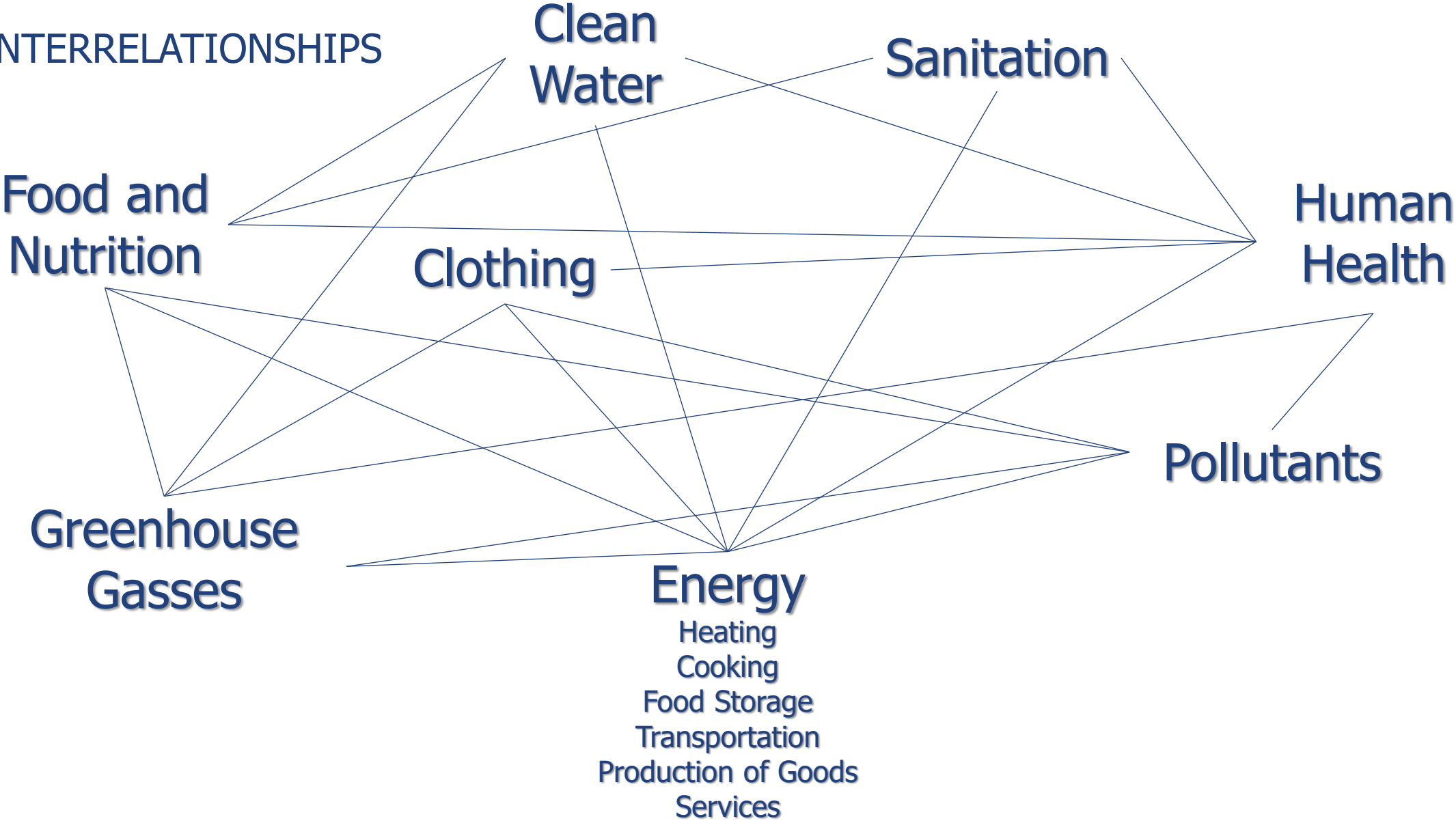
Pollutants

Greenhouse
Gasses

Energy

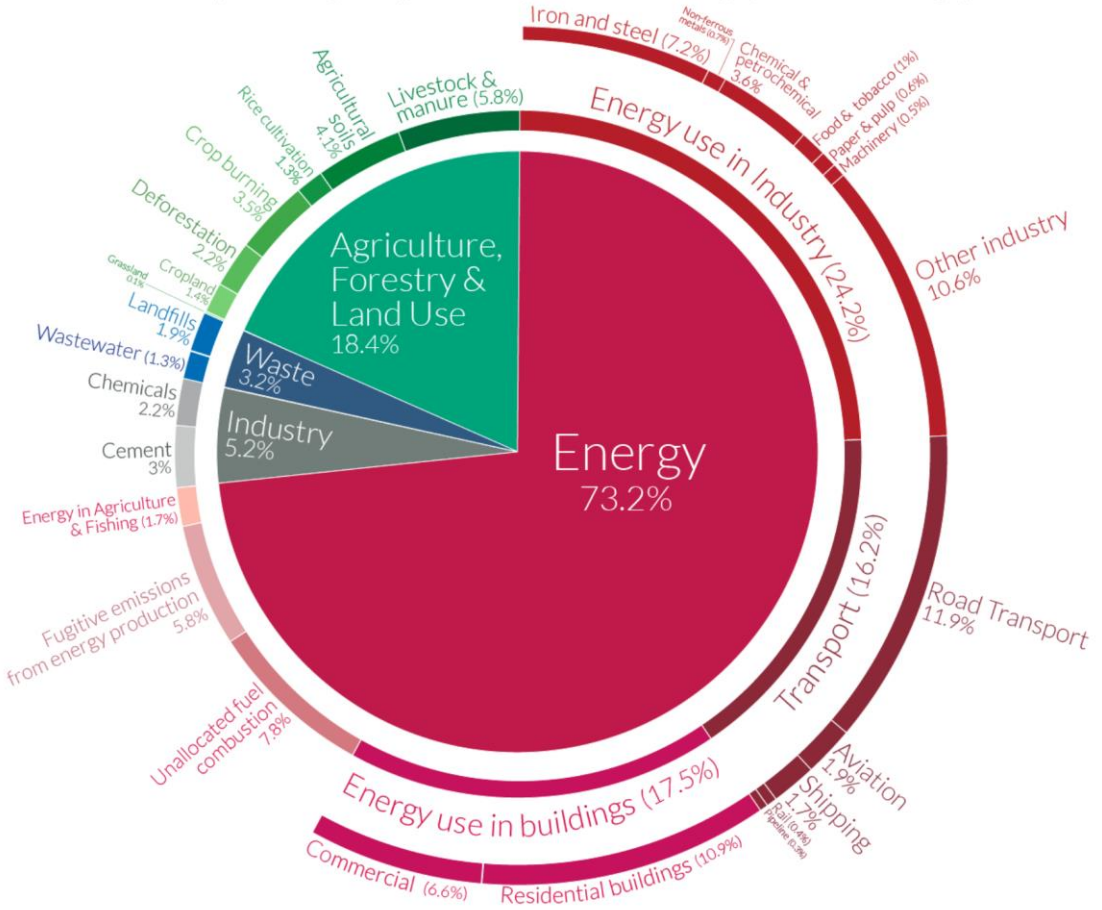
Heating
Cooking
Food Storage
Transportation
Production of Goods
Services

LOTS OF INTERRELATIONSHIPS



GAINING PERSPECTIVE: 73% OF GLOBAL GHG EMISSIONS COME FROM THE BURNING OF FOSSIL FUELS

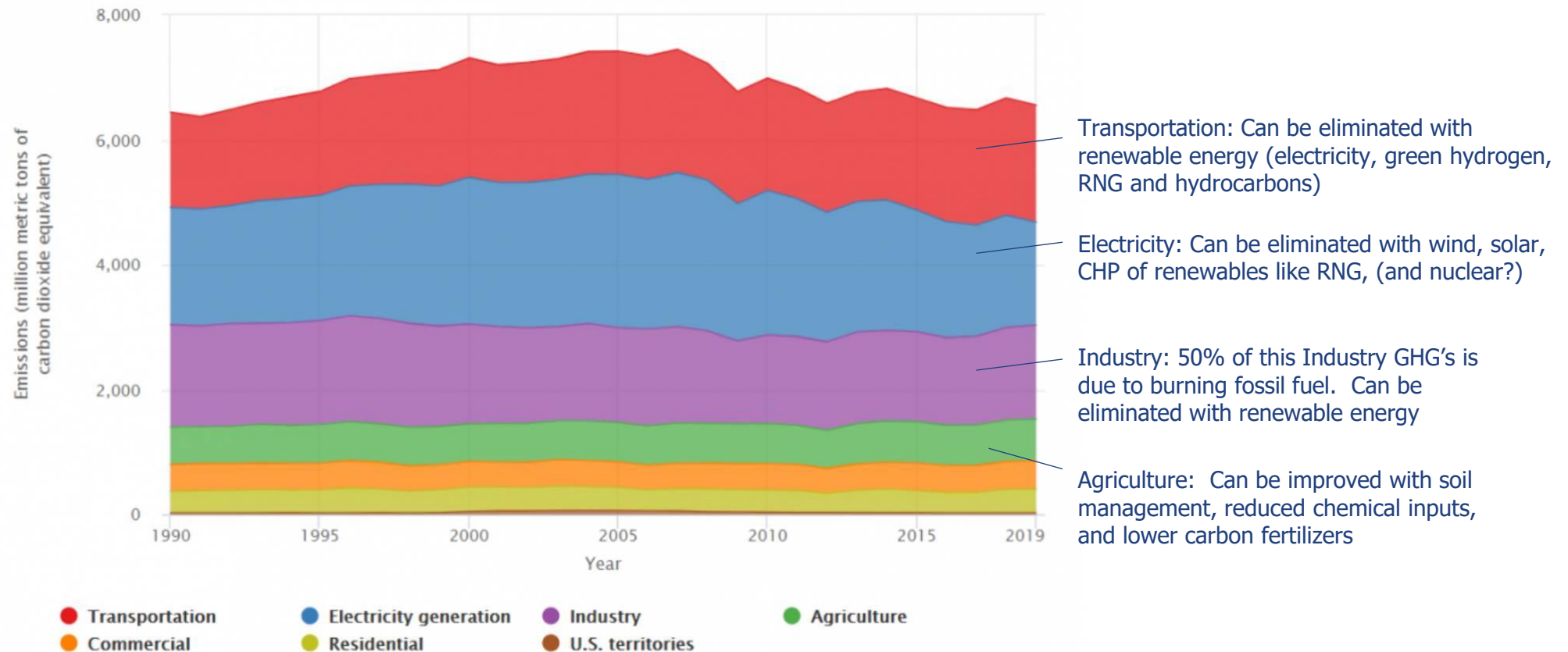
Global greenhouse gas emissions by sector Our World in Data
This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO₂eq.



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).

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

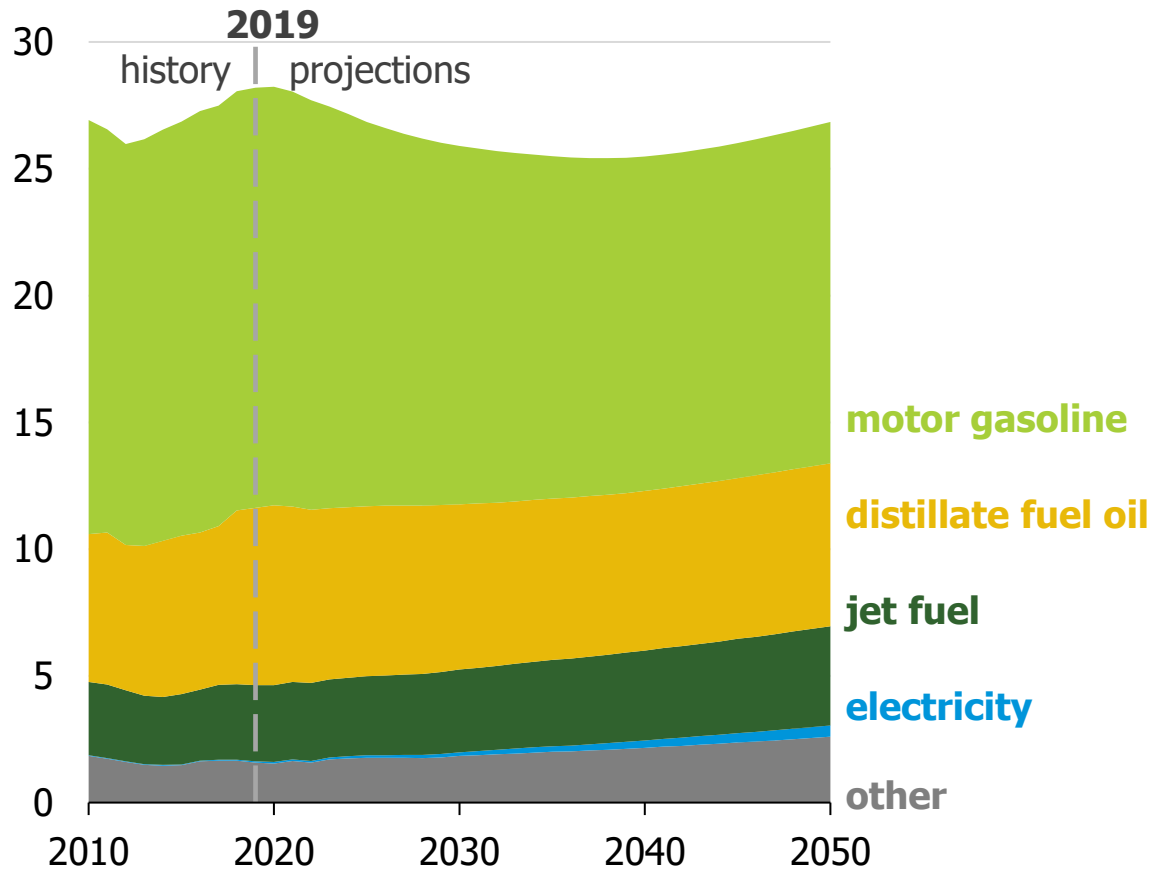
U.S. Greenhouse Gas Emissions by Economic Sector, 1990–2019



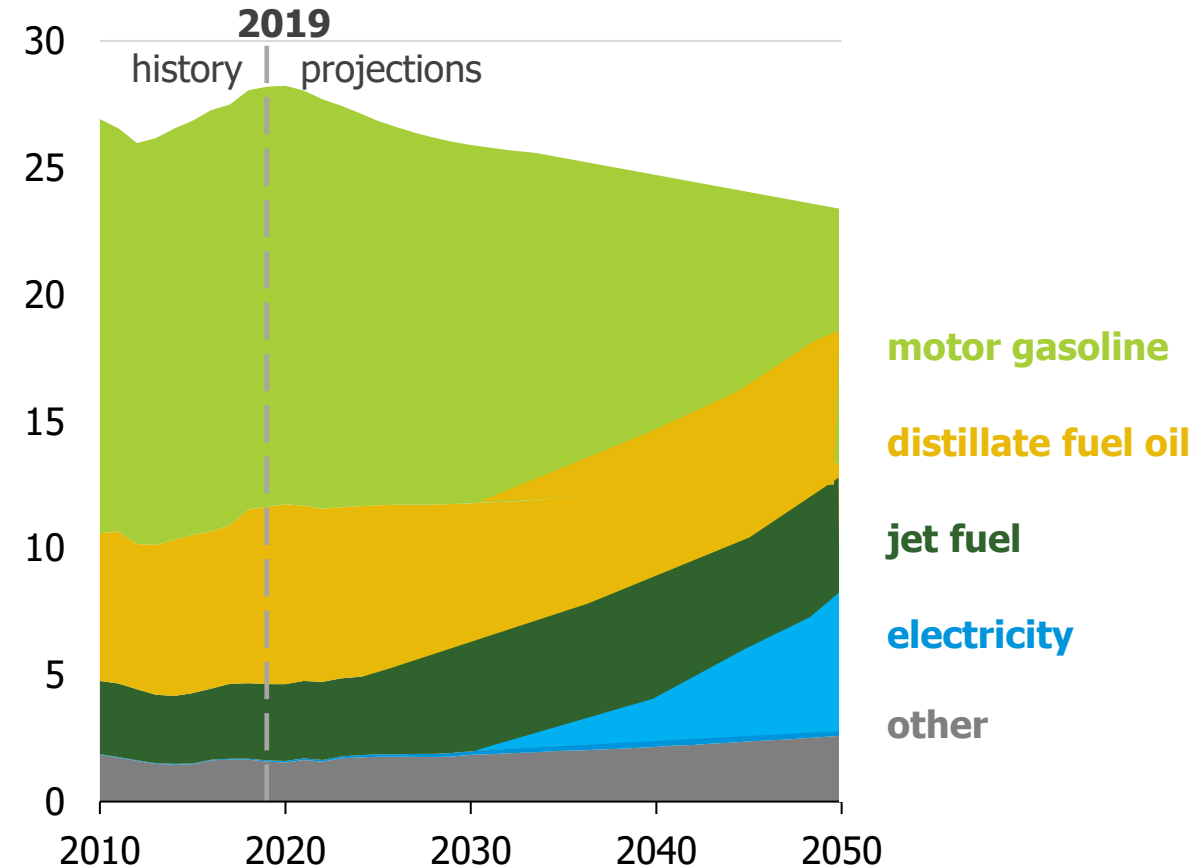
Source: U.S. EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2019.
<https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>

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

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



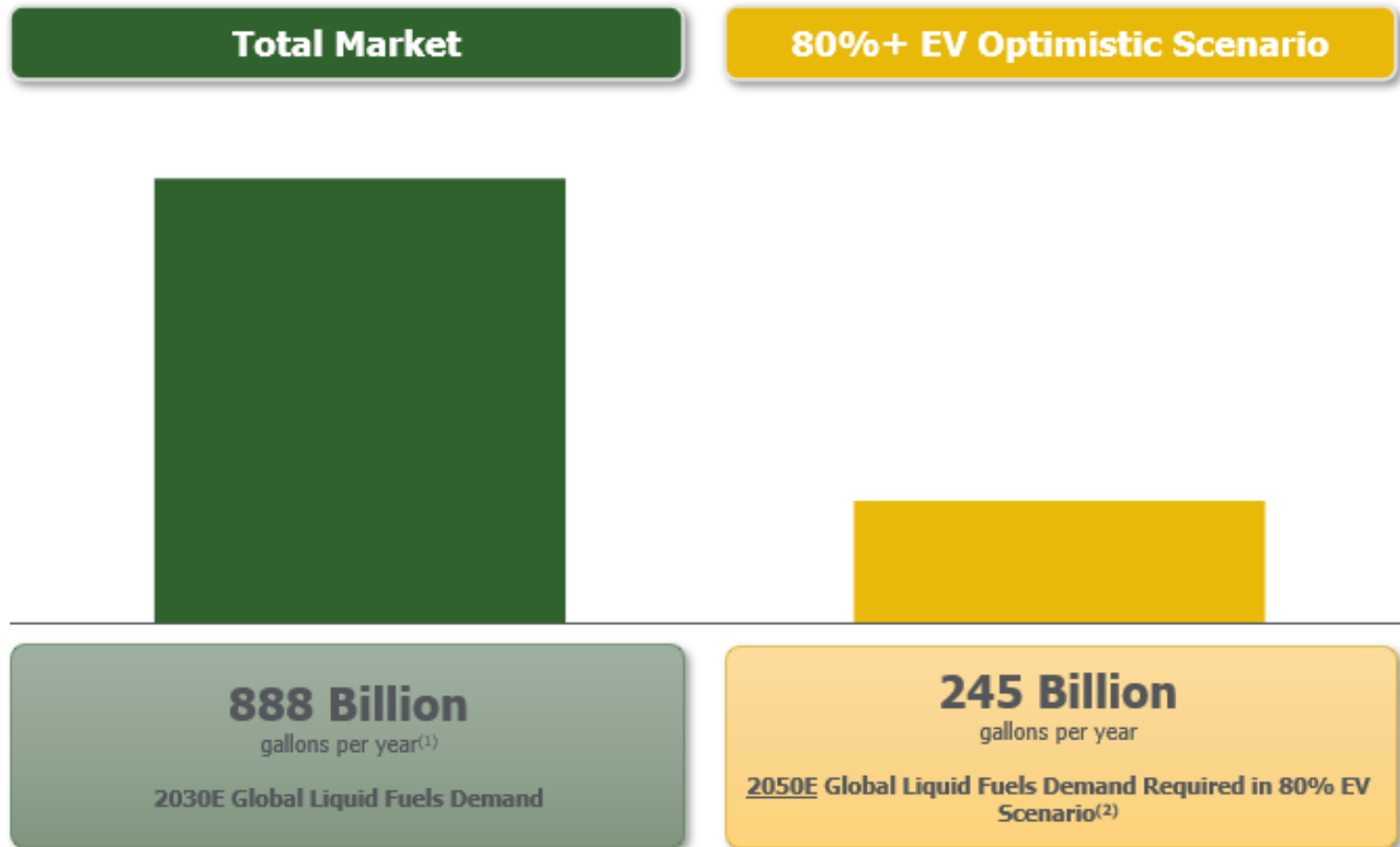
**Hypothetical Projection Assuming
Significant Penetration Of Electrification***
quadrillion British thermal units



Source: U.S. Energy Information Administration, Annual Energy Outlook 2020, Reference Case

*Hypothetical case based on EIA numbers and data from Rhodium Group Study 2020. The penetration rate of electrification is highly uncertain.

ENORMOUS TOTAL ADDRESSABLE MARKET



Even with the most optimistic projections of the adoption of EV, fuel cells, etc., the need for hydrocarbons will still be very large.

We should de-fossilize the remaining gallons

(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.

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

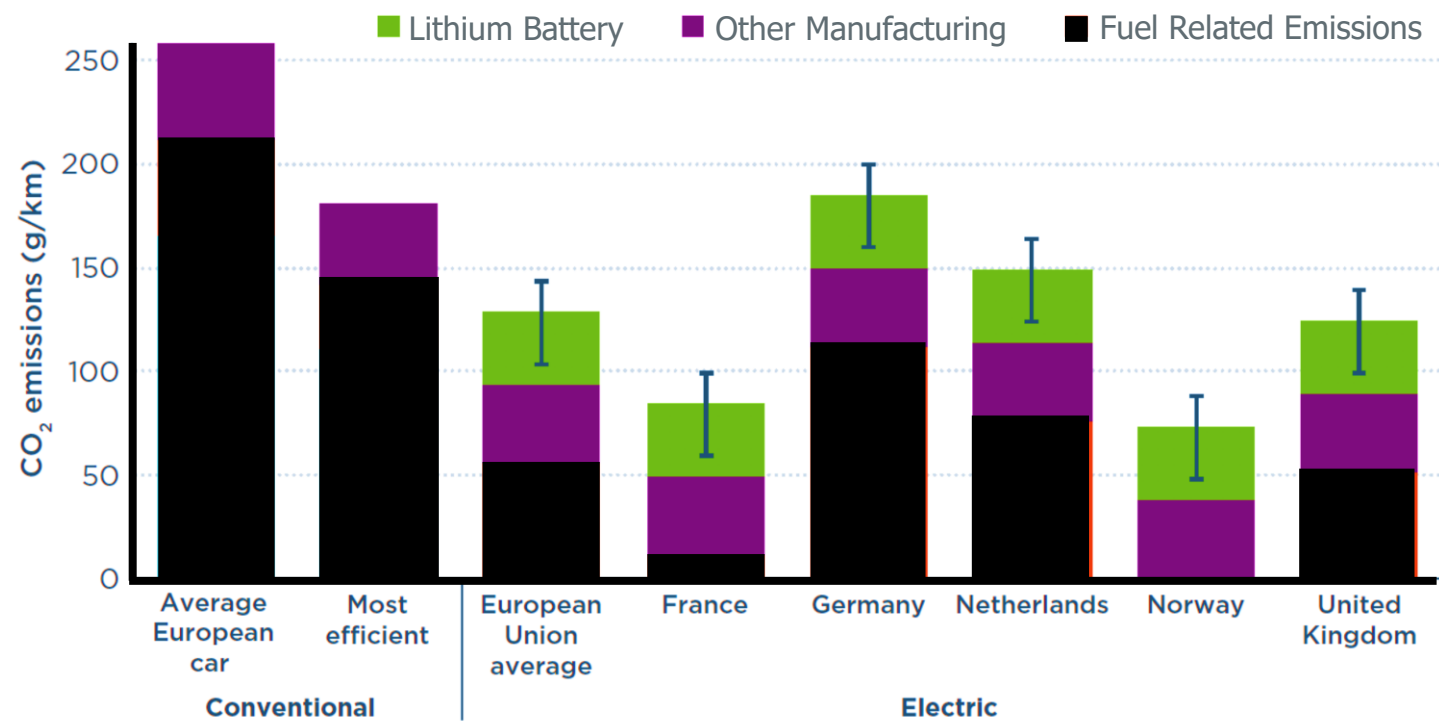
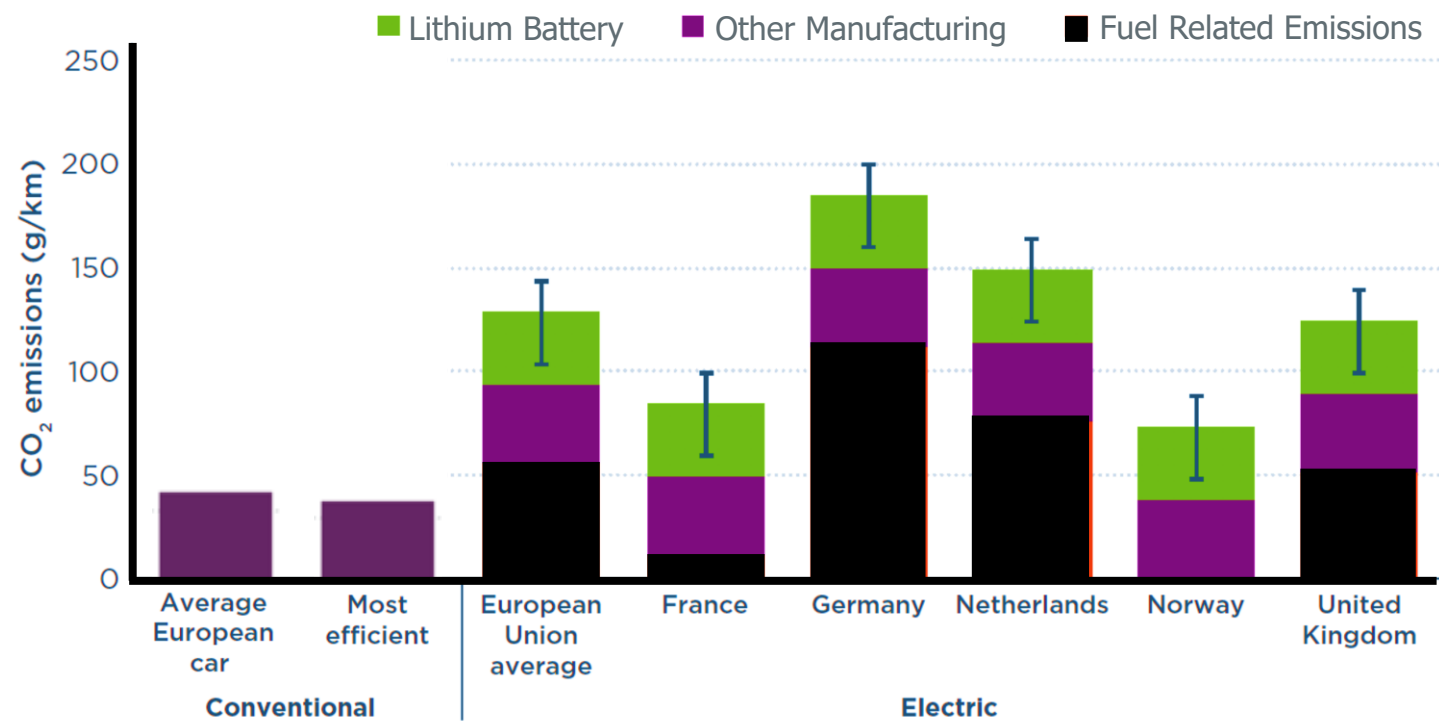


Figure 1. Life-cycle emissions (over 150,000 km) of electric and conventional vehicles in Europe in 2015.

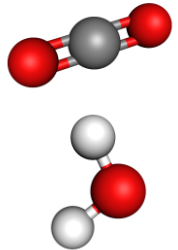
IF WE USE A NET-ZERO FUEL, IT'S CONCEIVABLE!



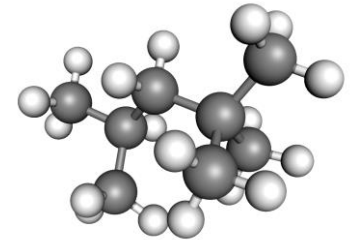
Source: Adapted from ICCT, "Effects of battery manufacturing on electric vehicle life-cycle greenhouse gas emissions", Feb 2018 by eliminating the tailpipe GHG emissions to make a point.

BURNING OF FOSSIL FUEL RELEASES FOSSIL CARBON

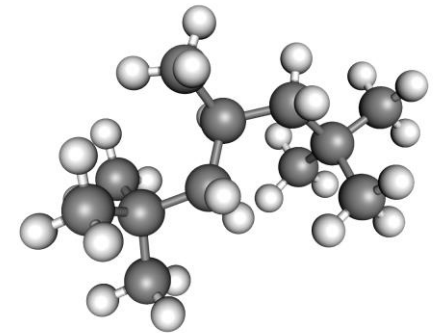
Liquid Hydrocarbons are a Terrific Energy Carrier; Infrastructure Already Exists



Carbon Dioxide
Water

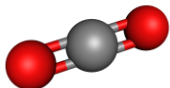
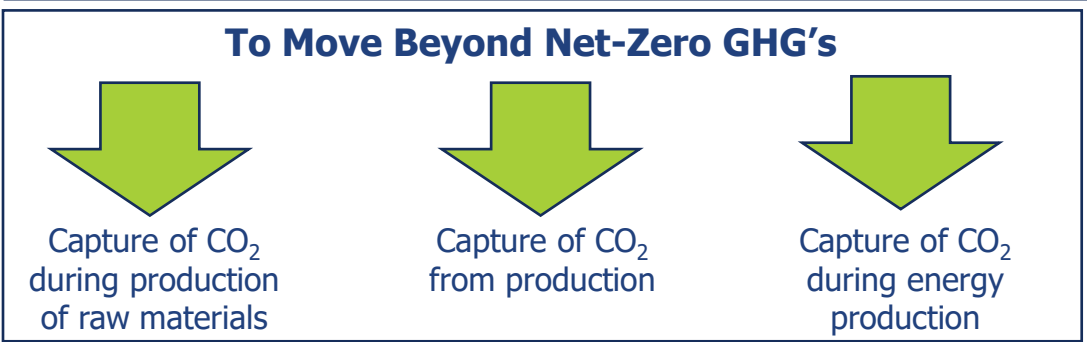
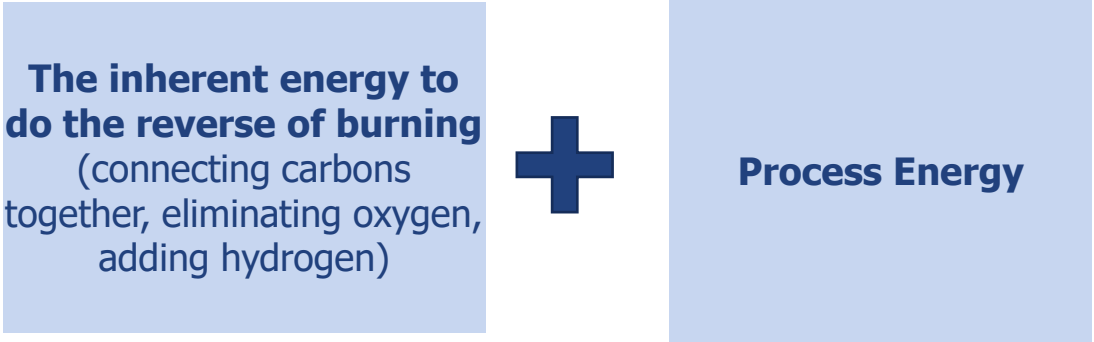


Isooctane (gasoline)

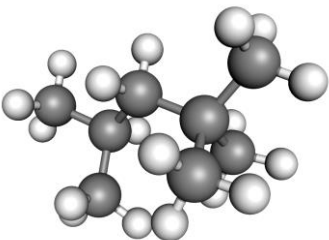


Jet Fuels

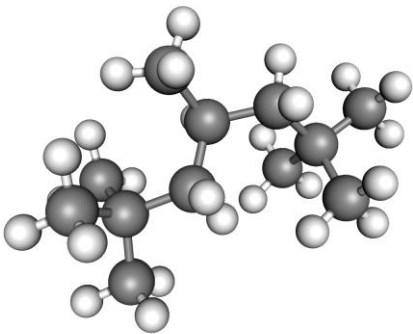
HOW TO SOLVE THE PROBLEM



Carbon Dioxide



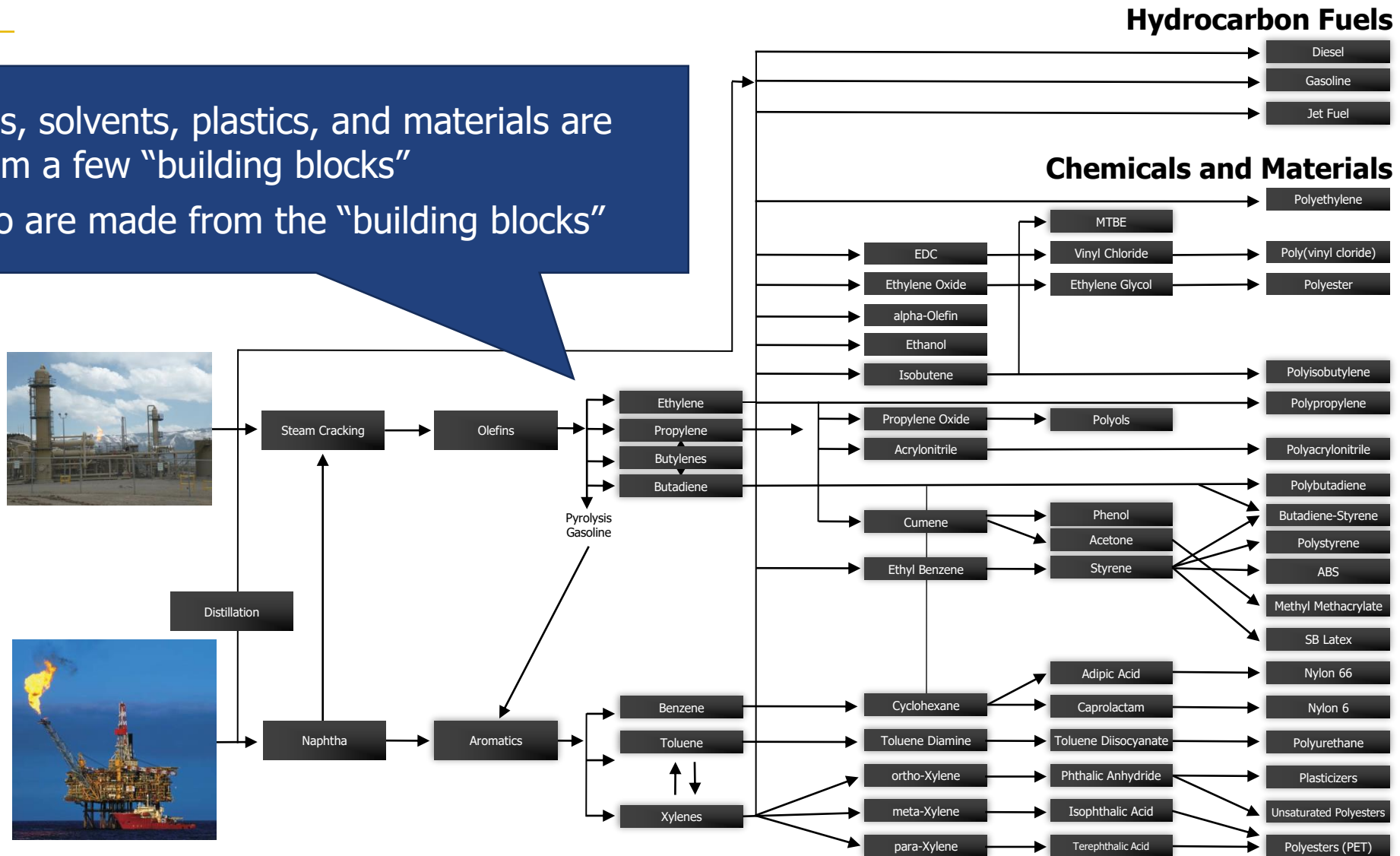
Isooctane (gasoline)



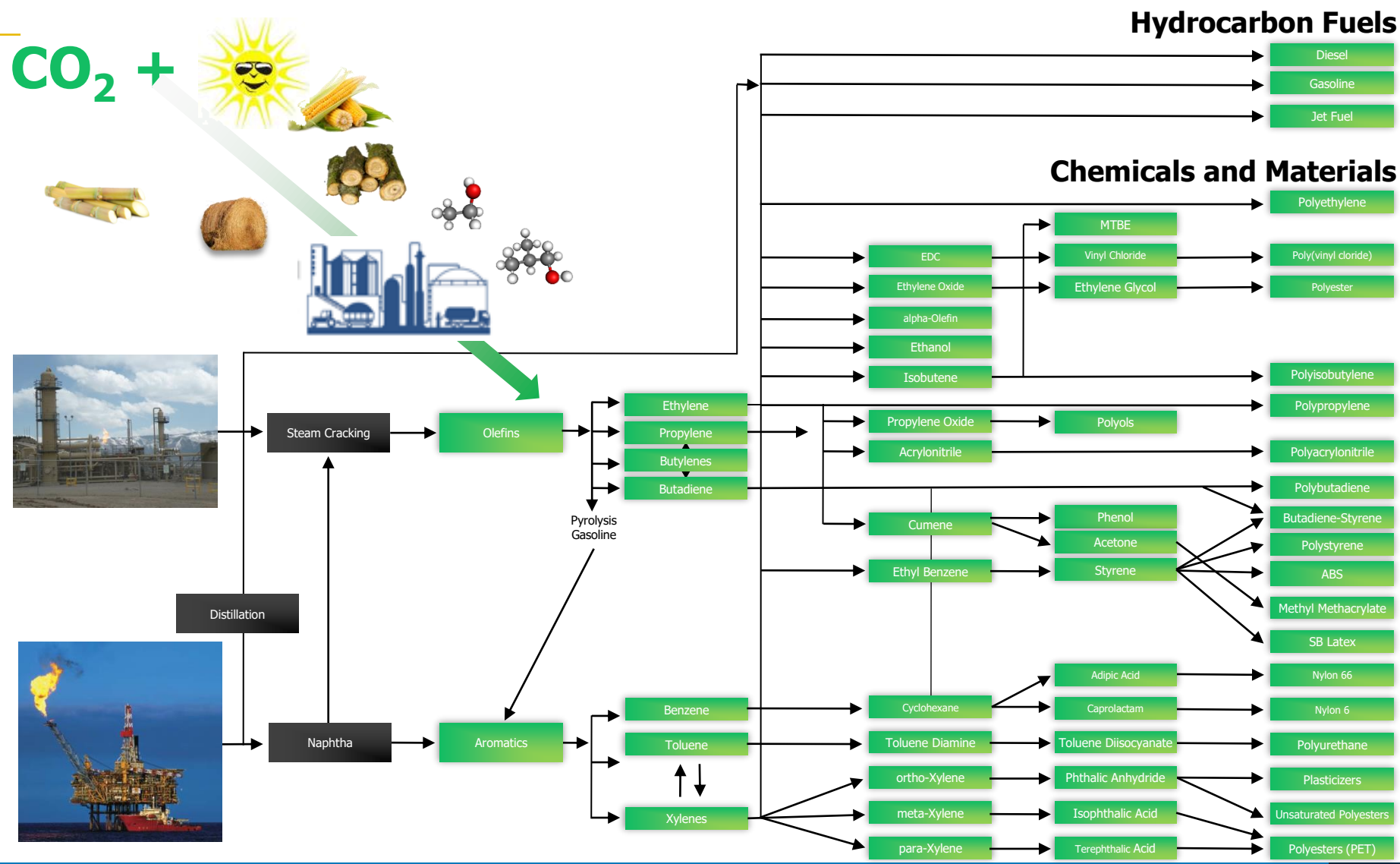
Jet Fuels

PROCESSES USED **TODAY** TO MAKE PETROCHEMICALS AND FUELS

- Chemicals, solvents, plastics, and materials are made from a few “building blocks”
- Fuels also are made from the “building blocks”

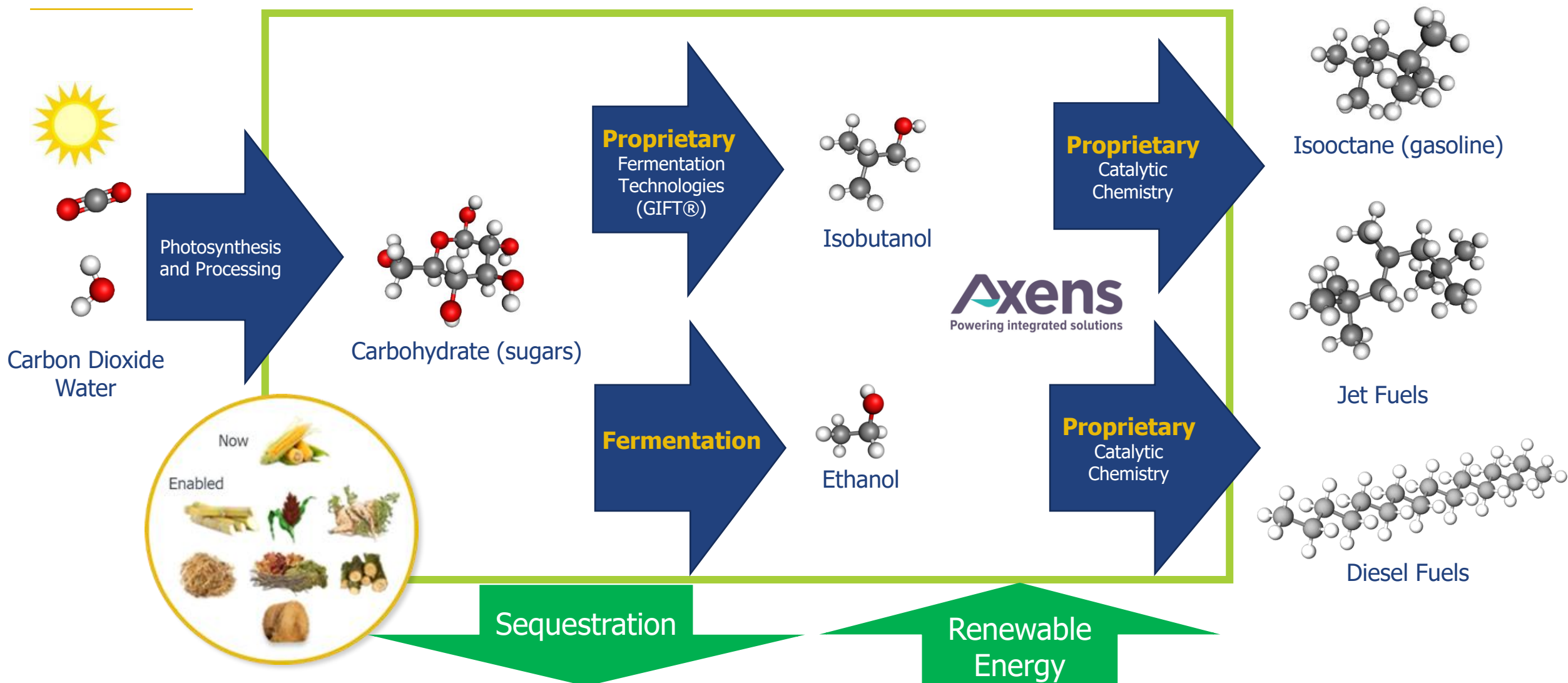


FROM JUST ISOBUTANOL (IBA) AND ETHANOL MOST CHEMICALS AND FUELS CAN BE MADE COST-EFFECTIVELY IF CARBON VALUE IS TAKEN INTO ACCOUNT

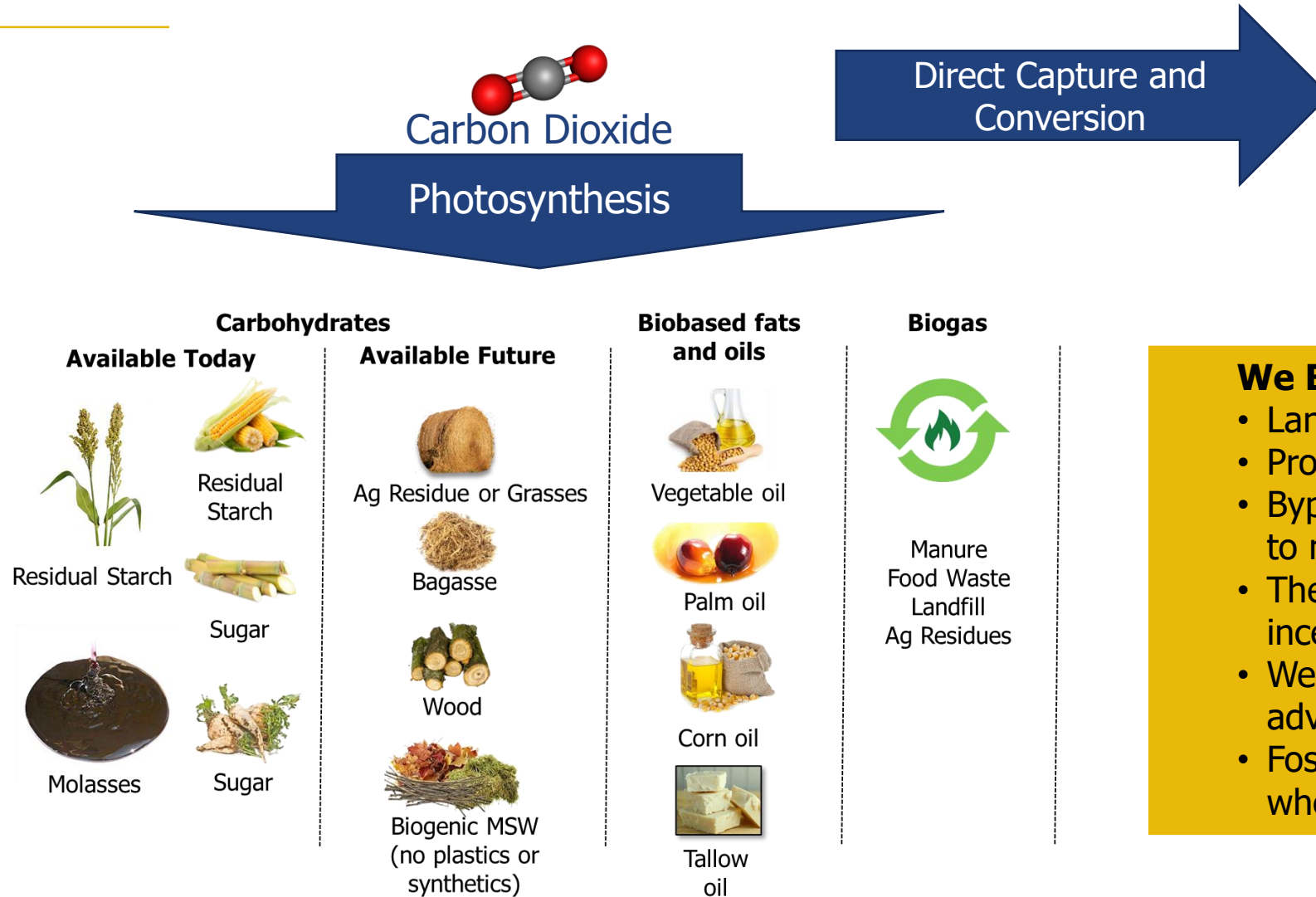


Source: Adapted from Nexant
Note: Chemicals shaded green denote those which can be made from ethanol and or isobutanol derived building blocks.

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



WHAT ARE THE NON-FOSSIL CARBON FEEDSTOCK POSSIBILITIES?



We Believe:

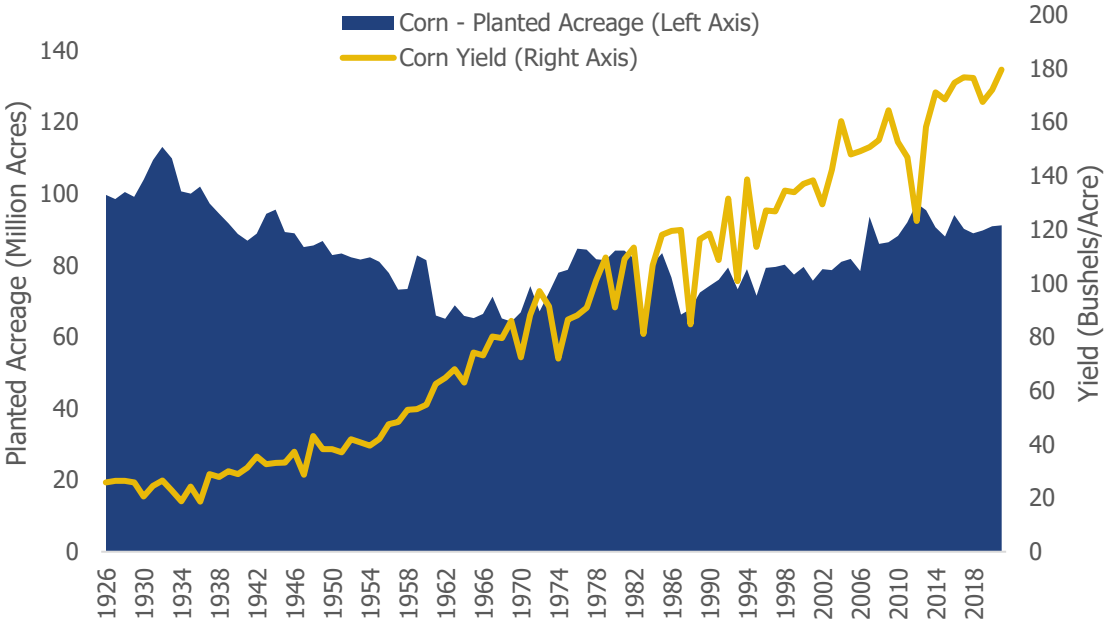
- Land should be used first for food/feed
- Protein is needed, demand will grow
- Byproducts from food/feed should be used to make materials and fuels
- The whole supply chain should be incentivized to improve sustainability
- We should capture carbon in soil through advanced farming practices
- Fossil carbon should be eliminated wherever possible

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

Corn Produces Large Quantities of Protein, Oil, and Residual Starch. Based on Total Proximate Analysis (not recovery) ³

	MT/ha	Protein		Fat and Oil		Carbohydrate	
		%	Mt/ha	%	MT/ ha	%	MT/ha
Corn	11.86	10%	1.23	5%	0.63	82%	9.73
Soybeans	3.47	36%	1.25	20%	0.69	34%	1.18

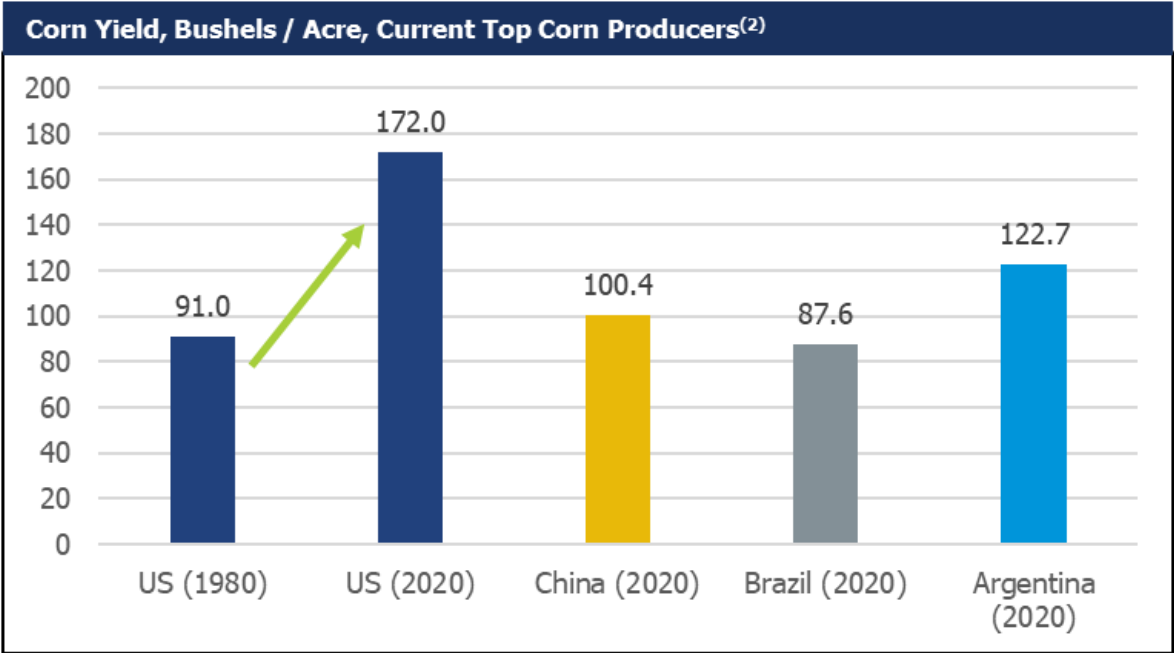
Land Use Has Stayed Relatively Stable, While Yields have Dramatically Improved¹



(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) Crop yields from Our World in Data. Compositional data is from the Nutrient Data Laboratory USDA Aug 10, 2016.

WE SHOULD IMPROVE AGRICULTURE, GENERATE MORE PROTEIN AND CAPTURE SOIL CARBON, WHILE IMPROVING OVERALL SUSTAINABILITY ACROSS THE WHOLE WORLD

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



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) Crop yields from Our World in Data. Compositional data is from the Nutrient Data Laboratory USDA Aug 10, 2016.

AGRICULTURE AND LAND MANAGEMENT OFFERS MORE CARBON SEQUESTRATION POTENTIAL

- **Land management practices** can significantly increase carbon sequestration on existing farmland.
 - The **IPCC AR5** estimated a **total mitigation potential of 1.6 to 4.6 gigatons CO₂e by 2030** with agriculture and livestock best practices¹.
- According to researchers at Purdue University:
 - **Reduced and no-till practices on US cropland today sequester 52 million metric tonnes of carbon**
 - **If No-till practices were** implemented on all US cropland:
 - could sequester **123 million metric tonnes of carbon** per year
 - equivalent to **roughly 2% of all US CO₂ emissions!**
 - **Cover crops** on US cropland hold the potential to sequester **147 million metric tonnes** per year if adopted on all cropland!
- **Other best practices**, such as **improved fertilizer use** and **reductions in fossil fuel combustion**, could further improve the environmental impact of existing agriculture.

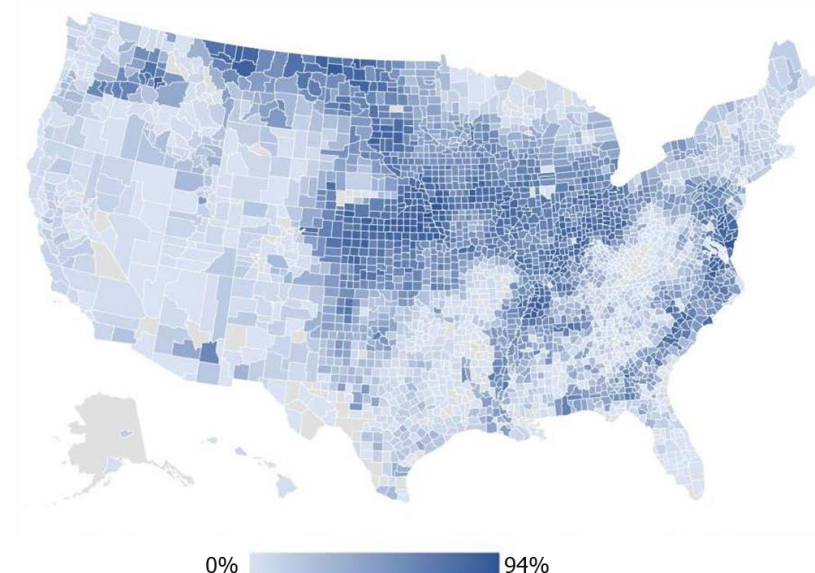
Agriculture improvements should increase the carbon sequestered in land

According to EPA in 2019
www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks

6.6 GT of CO₂e Emissions
0.8 GT Sequestered in Land

5.8 GT Overall Net Emissions

Proportion of Cropland Acres in No-Till or Conservation Tillage²

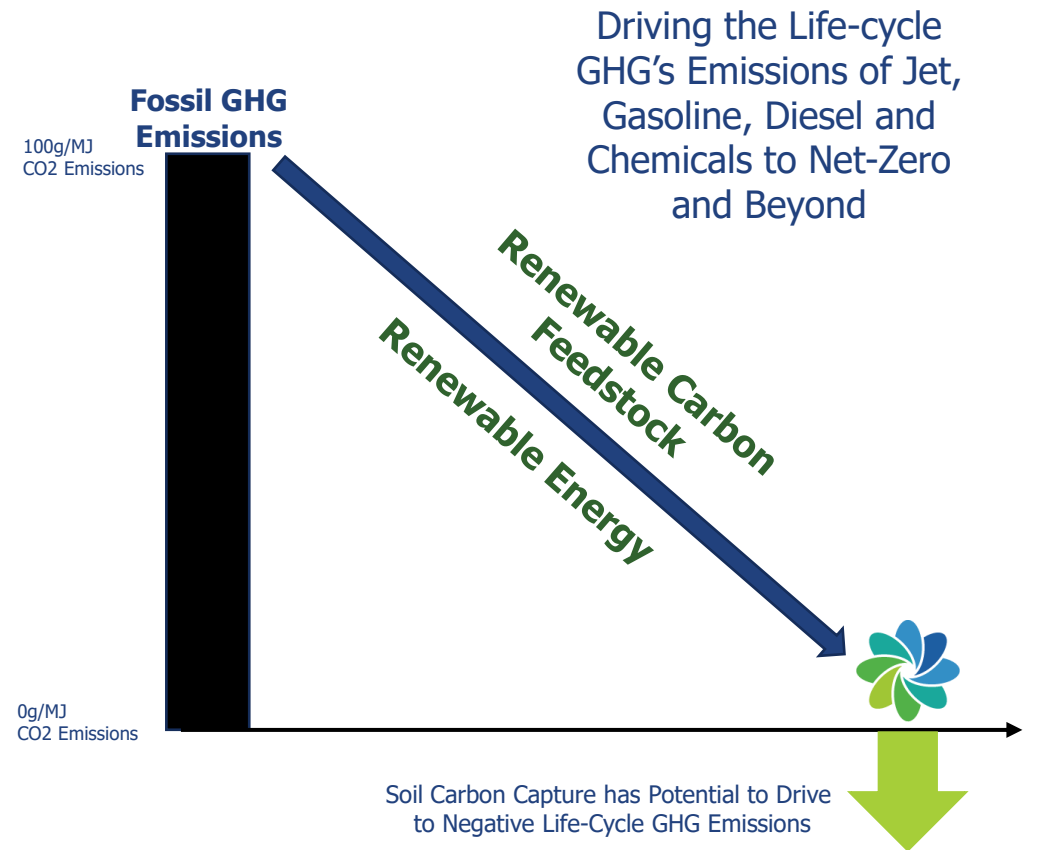


Proportion of Cropland Acres in No-Till or Conservation Tillage

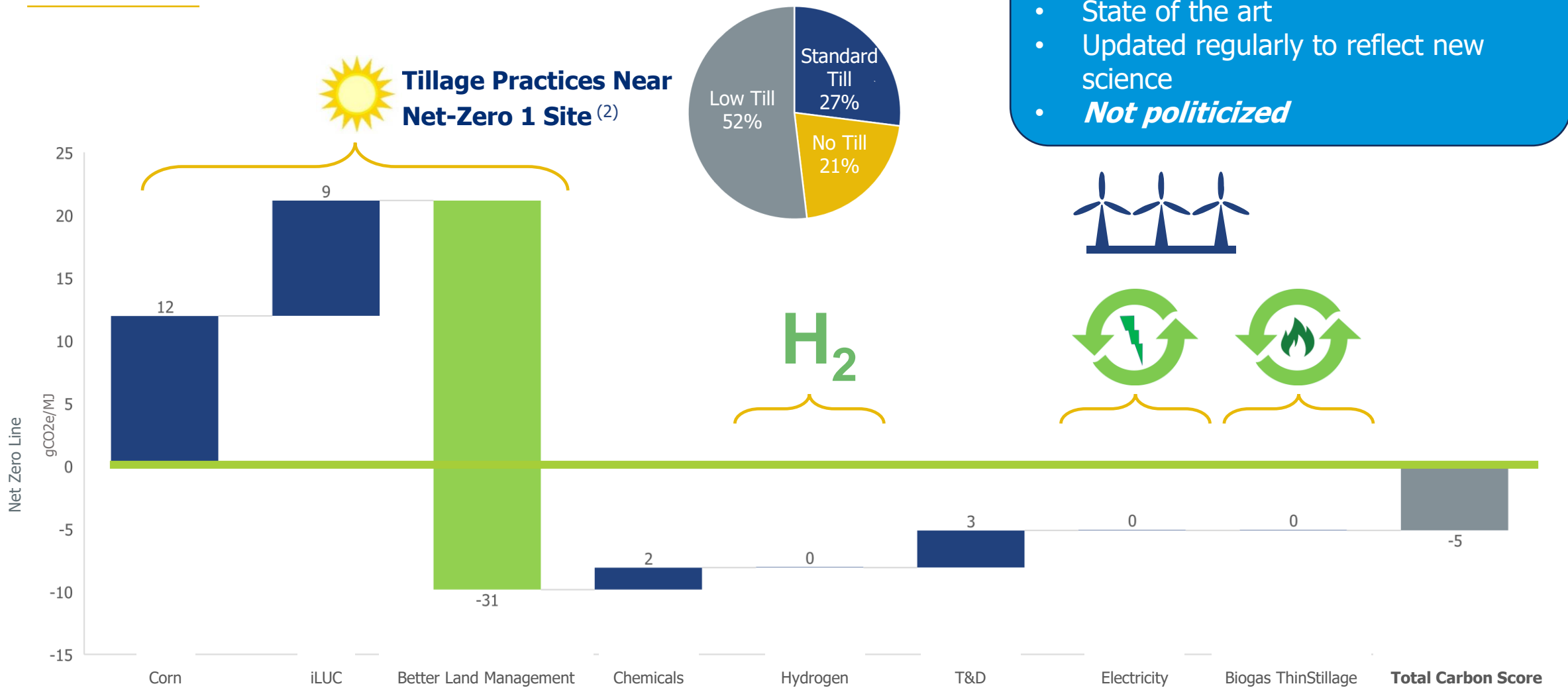
(1) Mbow, C., C. Rosenzweig, L.G. Barioni, T.G. Benton, M. Herrero, M. Krishnapillai, E. Liwenga, P. Pradhan, M.G. Rivera-Ferre, T. Sapkota, F.N. Tubiello, Y. Xu, 2019: Food Security. In: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D.C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. In press.

(2) Thompson, N. et al. (2021) "Opportunities And Challenges Associated With "Carbon Farming" For U.S. Row-Crop Producers", Purdue University Center for Commercial Agriculture. Accessed on August 12, 2021 at <https://ag.purdue.edu/commercialag/home/resource/2021/06/opportunities-and-challenges-associated-with-carbon-farming-for-u-s-row-crop-producers/>. Image available on same site, powered by Bing, GeoNames, Microsoft, and TomTom

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



NET-ZERO 1 PRODUCT GHG SOURCES (BASE CASE)



Note: Gevo is actively working with Argonne to publish GHG values for Net-Zero 1 and future plants.

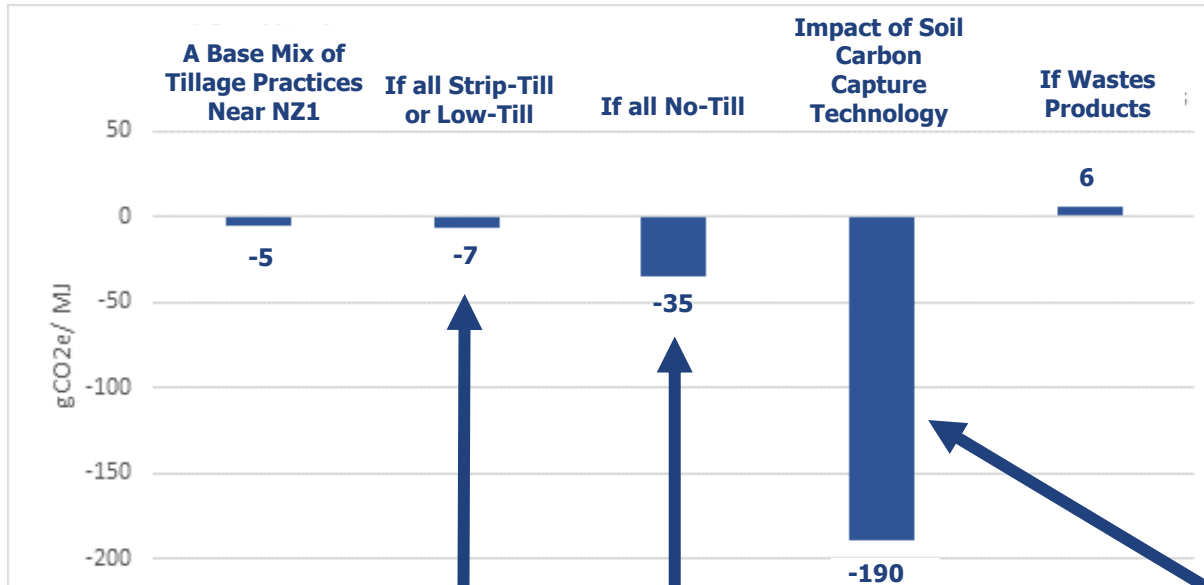
(1) Better management defined by Argonne on average as low farming CI, and sustainable farming practices like cover crops.

(2) Depending on corn portfolio Gevo has, the -31gCO₂/MJ value shown here will vary between 0 and -62. On average Gevo is assuming a conservative portfolio that mainly sources low tillage corn.

WE NEED TO CAPTURE EVEN MORE CARBON IN THE SOIL

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

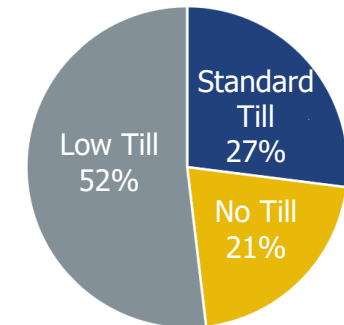
Impact of Agricultural Practice on Total Life-Cycle GHG Emissions for Hydrocarbons Burned for Transportation Energy ⁽¹⁾



Agriculture improvements are practical and being done

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

Tillage Practices Near Net-Zero 1 Site ⁽²⁾



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.

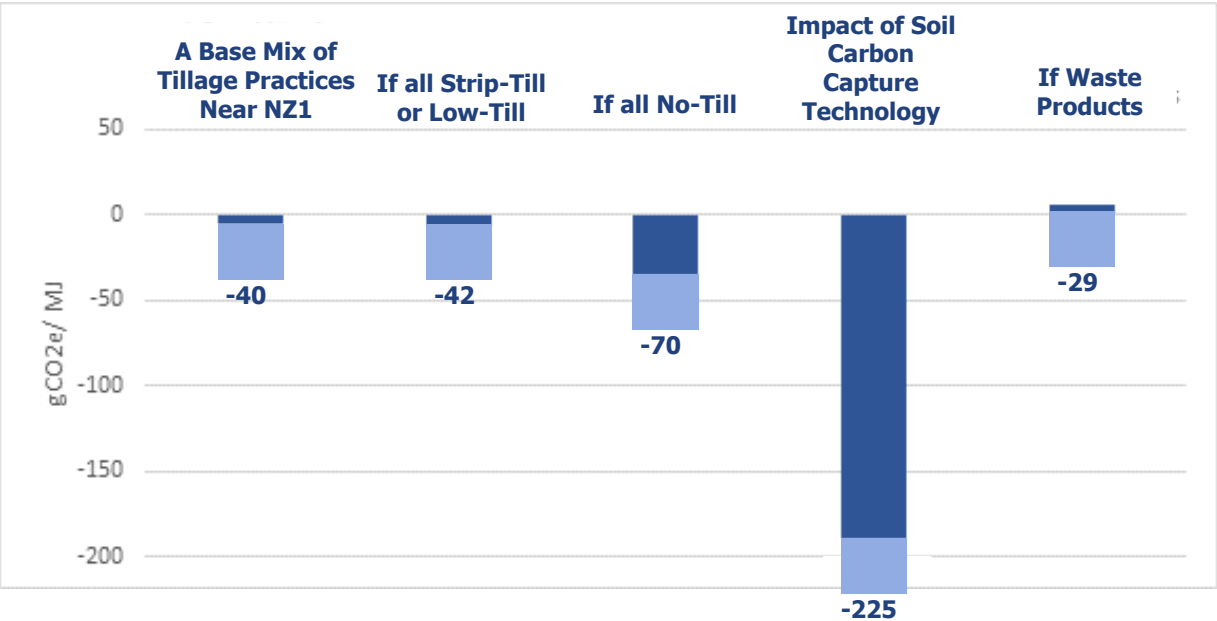
(1) EcoEngineers is in process of a detailed review and analysis.

(2) EcoEngineers, USDA – NRCS 2019 South Dakota Cropping Systems Inventory Report.

GEOLOGICAL SEQUESTRATION TO DRIVE CI DOWN EVEN MORE

ILLUSTRATIVE CASE: ASSUMES A NET-ZERO STYLE PLANT AND SEQUESTRATION OF CO₂ PRODUCED IN FERMENTATION

Impact of Agricultural Practice and Sequestration on Total Life-Cycle GHG Emissions for Hydrocarbons Burned for Transportation Energy ^{(1) (3)}



CI Score of SAF	CI Score of SAF/Petro Jet 50:50
0	~45
-40	~34
-89	~0

One gallon of -89 CI SAF makes two gallons of Net-Zero fuel when blended with petro-jet when blended 50:50

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

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



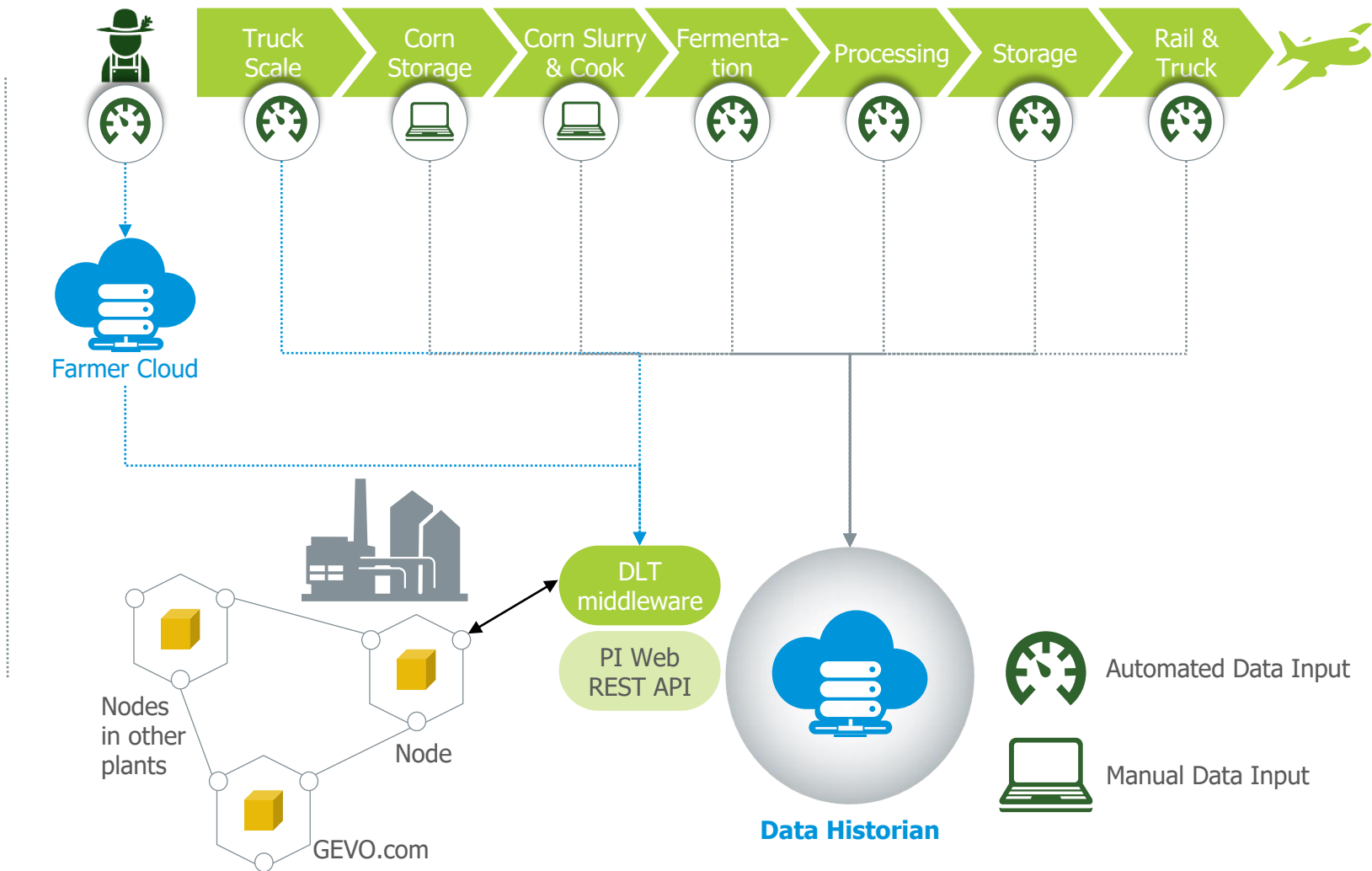
Encoded Data



Tamper-proof



Avoid Greenwashing and Double Counting










WE BELIEVE IN SUSTAINABILITY AUDITS AND 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

GEVO & WHAT WE DO



CHANGING WHAT IS POSSIBLE: CREATING A LOW-CARBON FUTURE

TRANSFORM RENEWABLE ENERGY INTO LIQUIDS



*ENABLES DECARBONIZATION OF FOOD,
FUELS, CHEMICALS AND MATERIALS*

- **We intend to transform renewable energy sources into a “drop in” fungible hydrocarbons for fuels and chemicals** (liquid hydrocarbons, such as jet fuel and gasoline, as well as ingredients for plastics, rubber, specialty chemicals products, and food chain products)
- We intend to **manage carbon and sustainability** across the **whole business system**
- **We are developers and investors** in biogas, wind electricity, in addition to hydrocarbons

THIS IS WHAT WE ARE WORKING TOWARDS

**1 Billion Gallons of Low Fossil Carbon
Hydrocarbons or More Per Year by 2030**

DEMAND IS INCREASING: WE BETTER THINK BIGGER, SOONER

✓ Large, Growing Portfolio

- Approximately \$1.6 billion⁽¹⁾ in take-or-pay contracts in place
- Additional >\$20 billion⁽²⁾ 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 and Financeable Off-Take ~52 of 54 MMGPY currently contracted is take-or-pay; additional ~900 MMGPY in contract development pipeline

Market Traction

46 MMGPY

Planned Capacity of
Single Gevo
Renewable Fuels
Plant⁽⁴⁾

54 MMGPY

Total Volumes
Currently
Contracted

~900 MMGPY

Total Volumes in
Contract
Development
Pipeline

**~\$1.6 billion
Take-or-Pay offtake
(signed)⁽¹⁾**

**>\$20 billion
Take-or-Pay Offtake
(negotiations and
discussions)⁽²⁾**

Other Off-Takes⁽³⁾

Gasoline



Global
Companies



City of Seattle

Jet Fuel



Global
Companies

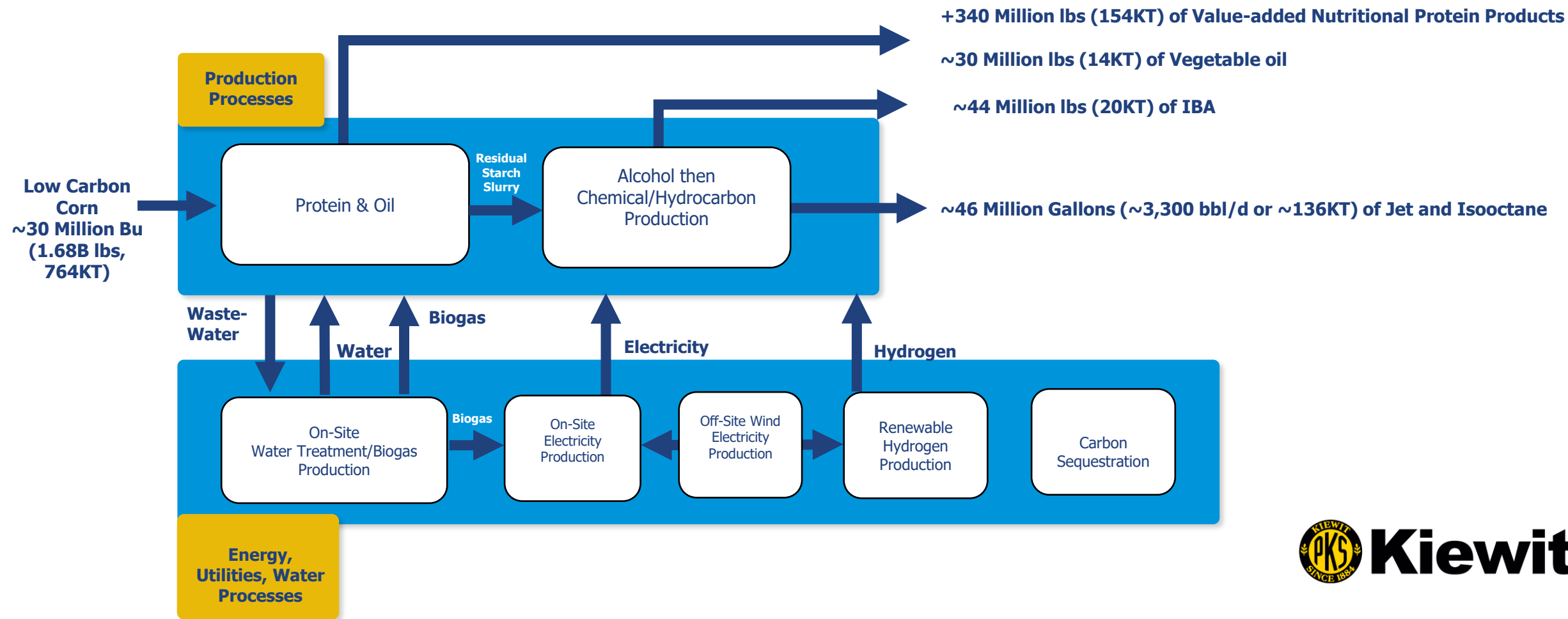


BOMBARDIER

(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

SCOPE OF NET-ZERO 1*

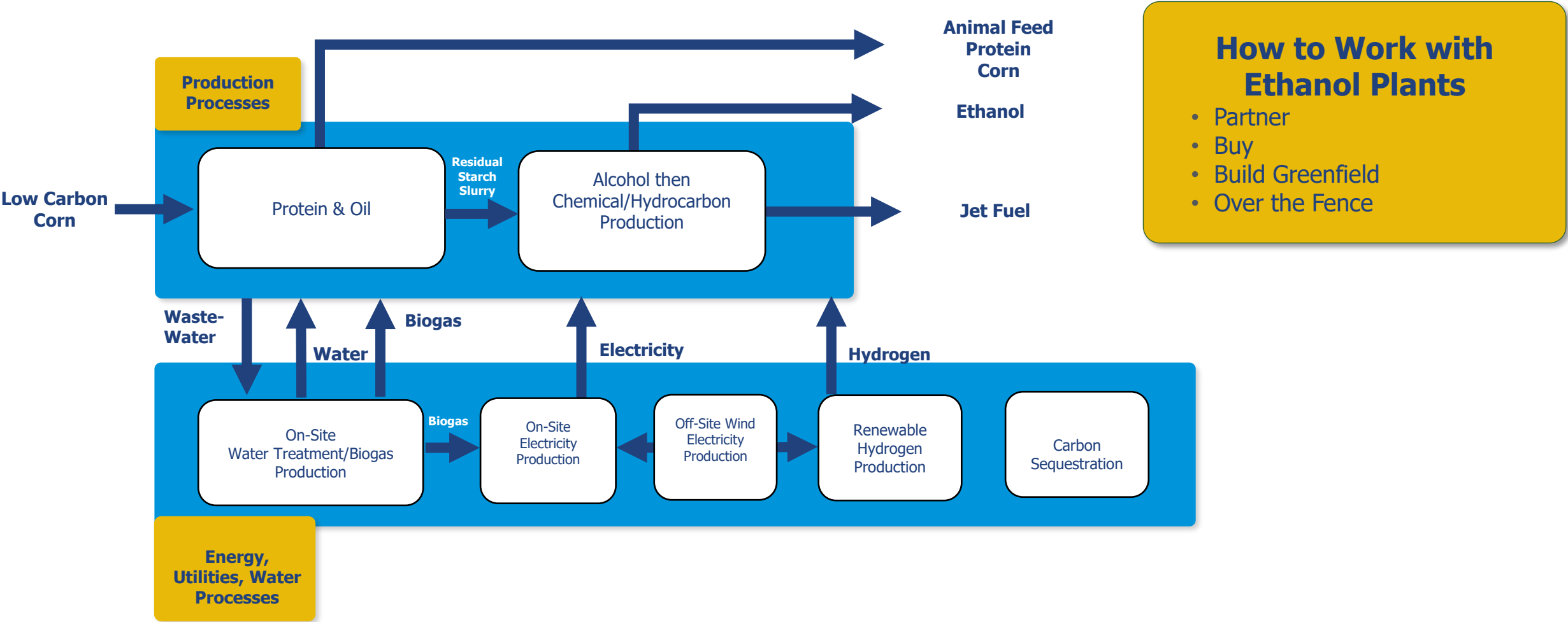
An “Off-the-Grid” Renewable Protein, Oil, Chemical and Hydrocarbon Plant VIA Isobutanol Route**



*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 be generated on-site and from the planned off-site wind farm. Gevo may also bring RNG to the plant from its RNG project.

EXAMPLE THE ETHANOL TO JET ROUTE

The Net-Zero Business Model Applies



GEVO COMMERCIALIZING RENEWABLE ENERGY

Gevo Northwest Iowa RNG LLC

Description

- 355,000 MMBtu/yr RNG
- 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 and ON TRACK
- ✓ Start-up expected in early 2022
- ✓ Sales & purchase agreement in place with bp



Wind Tower Servicing Gevo's Luverne, MN Plant



(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.

RECENT PRESS



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Gevo and Axens Ink Alliance for Ethanol-to-Jet Technology and Sustainable Aviation Fuel Commercial Project Development

ENGLEWOOD, Colo., October 12, 2021 -- Gevo, Inc. (NASDAQ: GEVO) and Axens North America, Inc. (Axens) have entered into an agreement that establishes a strategic alliance aimed at accelerating the commercialization of sustainable ethanol-to-jet (ETJ) projects in the United States. As part of the alliance, Axens brings technologies with over 60 related patents; engineering packages; proprietary catalysts; and certain proprietary equipment required to convert ethanol into jet fuel. Axens would also provide process guarantees for commercial ETJ projects. Gevo expects to develop, own, and operate ETJ plants to produce sustainable aviation fuel (SAF), utilizing its expertise in renewable alcohol production and technologies; Net-Zero business model; project financing expertise; customer relationships, and contracts.



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gevo.com

Gevo Acquires Butamax Patent Estate

Gevo adds fundamental patents to its portfolio for the production of renewable isobutanol and derivative renewable fuel products



Joint ADM-Gevo News Release

ADM, Gevo Sign MoU to Produce up to 500M Gallons of Sustainable Aviation Fuel

ADM Columbus and Cedar Rapids dry mills as well as ethanol assets from Decatur operations would transition from fuel ethanol to serving growing demand for lower-carbon aviation fuel

CHICAGO & ENGLEWOOD, Colo., Oct. 25, 2021 — ADM (NYSE: ADM), a global leader in nutrition and agricultural origination and processing, and Gevo, Inc., (NASDAQ: GEVO), a pioneer in transforming renewable energy into low carbon, energy-dense liquid hydrocarbons, announced today that they have signed a memorandum of understanding (MoU) to support the production of sustainable aviation fuel (SAF) and other low carbon-footprint hydrocarbon fuels.



Chevron, Gevo Announce Intent to Pursue Sustainable Aviation Fuel Investment

SAN RAMON, Calif./ENGLEWOOD, Colo., Sept. 9, 2021 — Chevron U.S.A. Inc., a subsidiary of Chevron Corporation (NYSE: CVX), and Gevo, Inc. (NASDAQ: GEVO) today announced a letter of intent to jointly invest in building and operating one or more new facilities that would process inedible corn to produce sustainable aviation fuel, which can lower the lifecycle carbon intensity of fuels used in the aviation industry. The new facilities would also produce proteins and corn oil.

Through the proposed collaboration, Gevo would operate its proprietary technology to produce sustainable aviation fuel and renewable blending components for motor gasoline to lower its lifecycle carbon intensity. In addition to co-investing with Gevo in one or more projects, Chevron would have the right to offtake approximately 150 million gallons per year to market to customers.

Let's do it!

"Make the World A Better Place By Improving the
Standard of Living For *All People* "

*Eliminate fossil-based emissions of fuels and chemicals, and related pollutants
while enhancing nutrition, land, water.*

Make renewable energy more available to more people, and more affordable

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>

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