

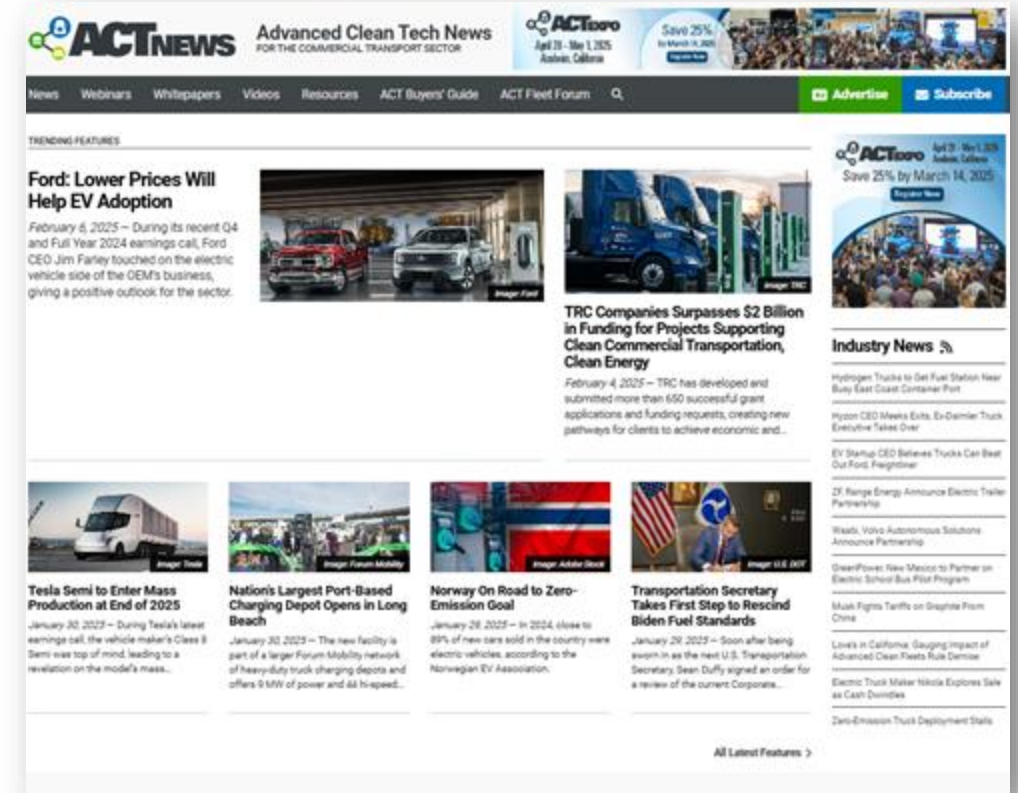
Future Prices & Availability of Existing Infrastructure: What's Next?

March 11, 2025

MESSY MIDDLE
BOOTCAMP

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Messy Middle Bootcamp Series

 **Diesel Drop-In Alternatives: Ultra-Low Sulfur, Bio-, and Renewable (February 11th)** ✓


 **Decarbonizing with Natural Gas (February 25th)** ✓

  **Future Prices & Availability of Existing Infrastructure: What's Next? (March 11th)**

DIESEL AND NATURAL GAS WORKSHOP (March 25th)

 **The Current State of HD BEV: Technologies and Capabilities (April 8th)**

 **Strategizing Successful HD BEV Adoption (April 27th)**

 **Charging Depots, Networks & the Economics of Fleet (May 6th)**

HD BEV WORKSHOP (May 20th)



The Production Processes of Hydrogen Fuel (June 3rd)

Moving Hydrogen from Here to There: The Distribution and Storage of Hydrogen Fuel (June 17th)

The Opportunities and Challenges of Selling Hydrogen to the Industry (July 1st)

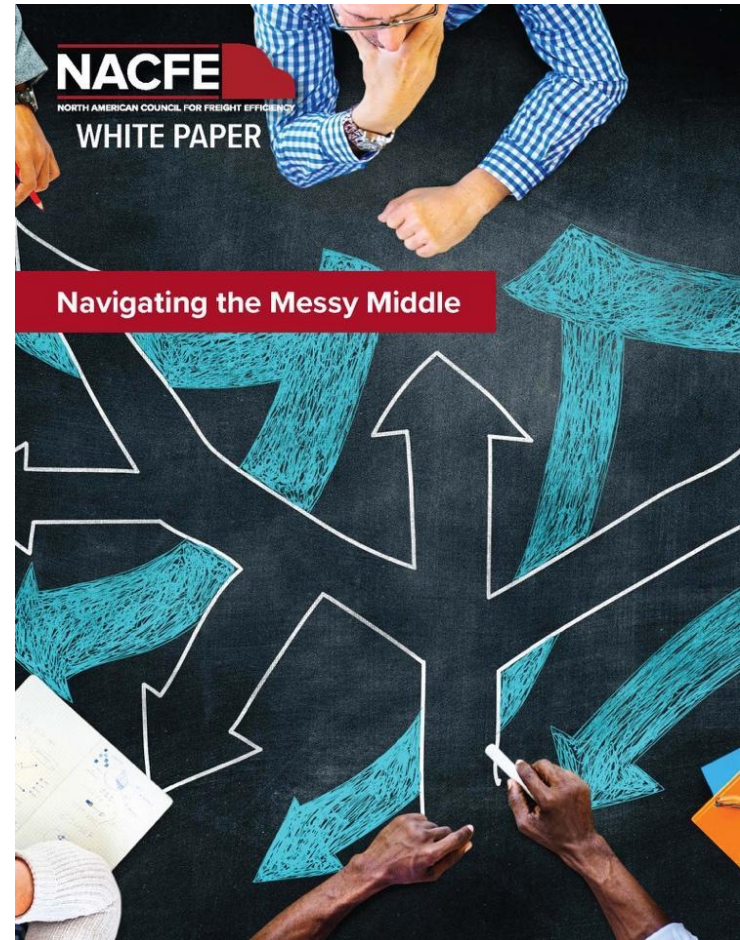
HYDROGEN FUEL CELL WORKSHOP (July 15th)

4

2023 Bootcamp is still available at: <https://runonless.com/electric-depot/>

Run on Less – Messy Middle

- Deeper dive into the term "Messy Middle"
- Decision-making process framework included
- Builds from 2023 Thought Leadership Report [*The Messy Middle: A Time for Action*](#)



[Access White Paper Here](#)



2025 Messy Middle Fleets



Update from The Run Planning...

Follow the Fleets, Drivers, providers, and more on:

RunOnLess.com and on Twitter @RunOnLess



Today's Bootcamp Sponsor



Quiz for Today's Session

Completing Today's Quiz:

- Go to runonless.com and click back into the session
- Click 'Take Quiz' button
- Create username and password to keep track of your progress
- Provide your name and email to enter a drawing for a Run on Less - Messy Middle swag bag



What You Should Know

Q&A

Submit your questions to the host using the Q&A box in the upper right-hand corner

Recording

A recording of today's webinar will be available on runonless.com

Technical Issues

Contact Stephane Babcock at
sbabcock@trccompanies.com



Today's Bootcamp Speakers

Future Prices & Availability of Existing Infrastructure: What's Next?



Ryan Bankerd

*Global Director of Automotive
Sustainability
UPS*



Jerome McCarville

*Manager, National Accounts
Chevron Renewable Energy
Group*



Nik Pavlenko

*Programs Director, Fuels and
Aviation
International Council on Clean
Transportation (ICCT)*



Derek Turbide

*Vice President of Renewable
Natural Gas Solutions for
Trucks & Buses
Clean Energy Fuels*



Navigating the Messy Middle: Life-Cycle Assessment of Alternative Fuels

Nikita Pavlenko

Aviation & Fuel Program Director, ICCT

March 2025

Many metrics to assess the technology performance

Fuel economy



Total cost of ownership



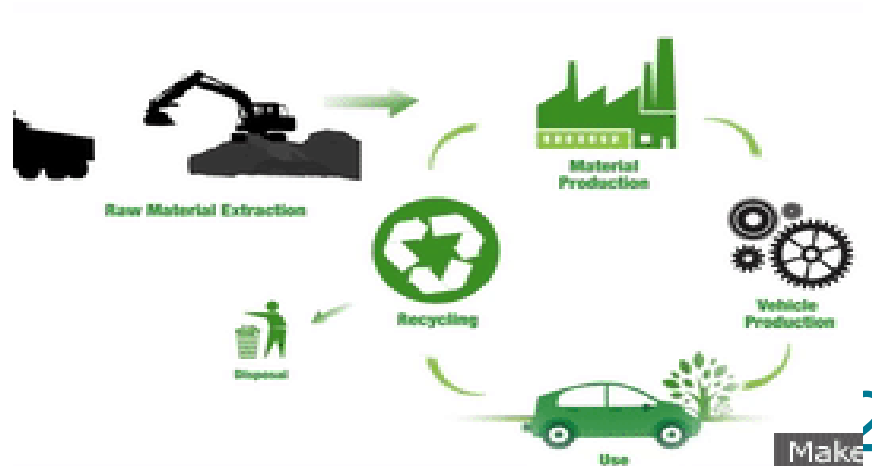
Driving range



Tailpipe CO₂ emissions

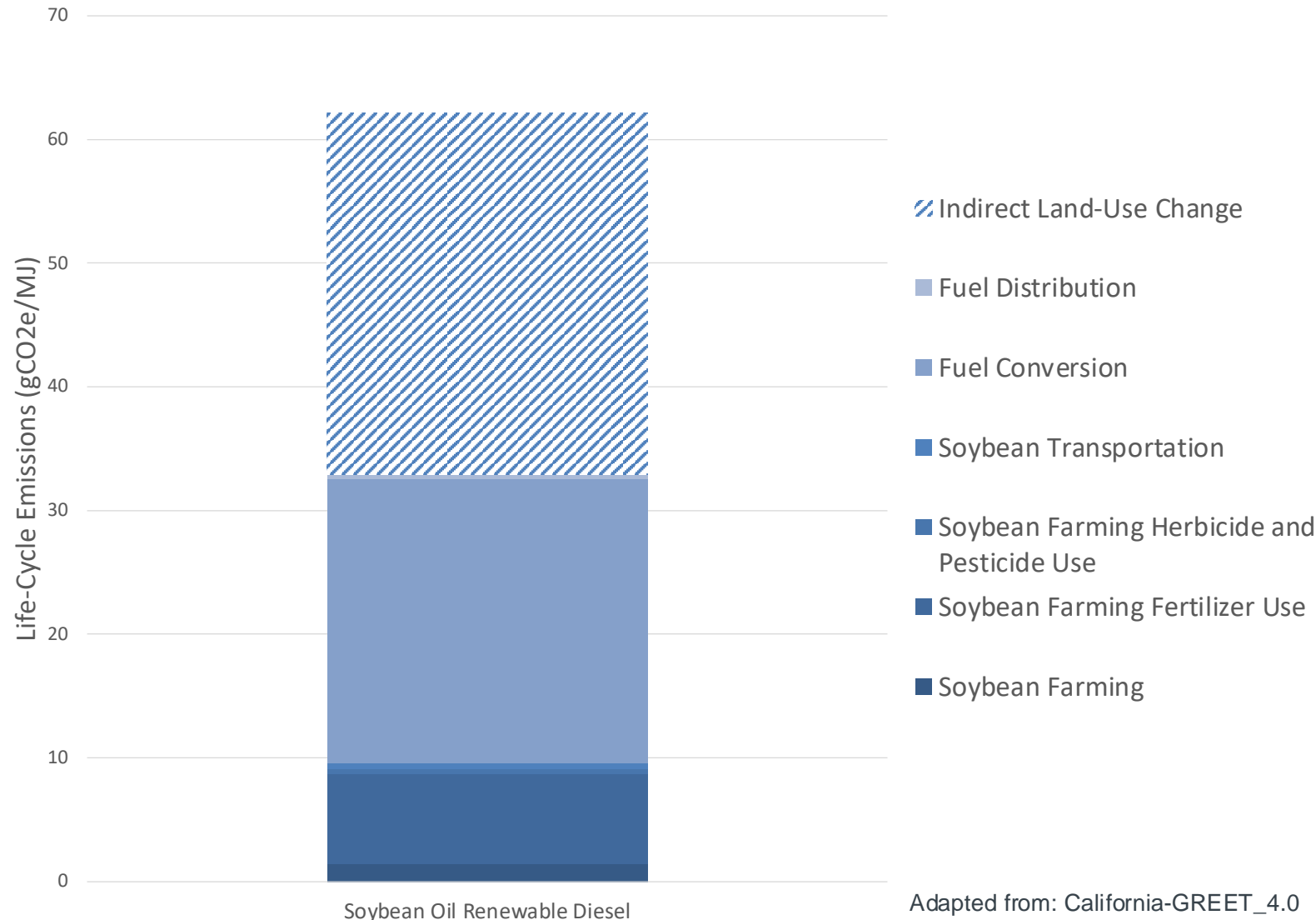


Life-cycle GHG emissions



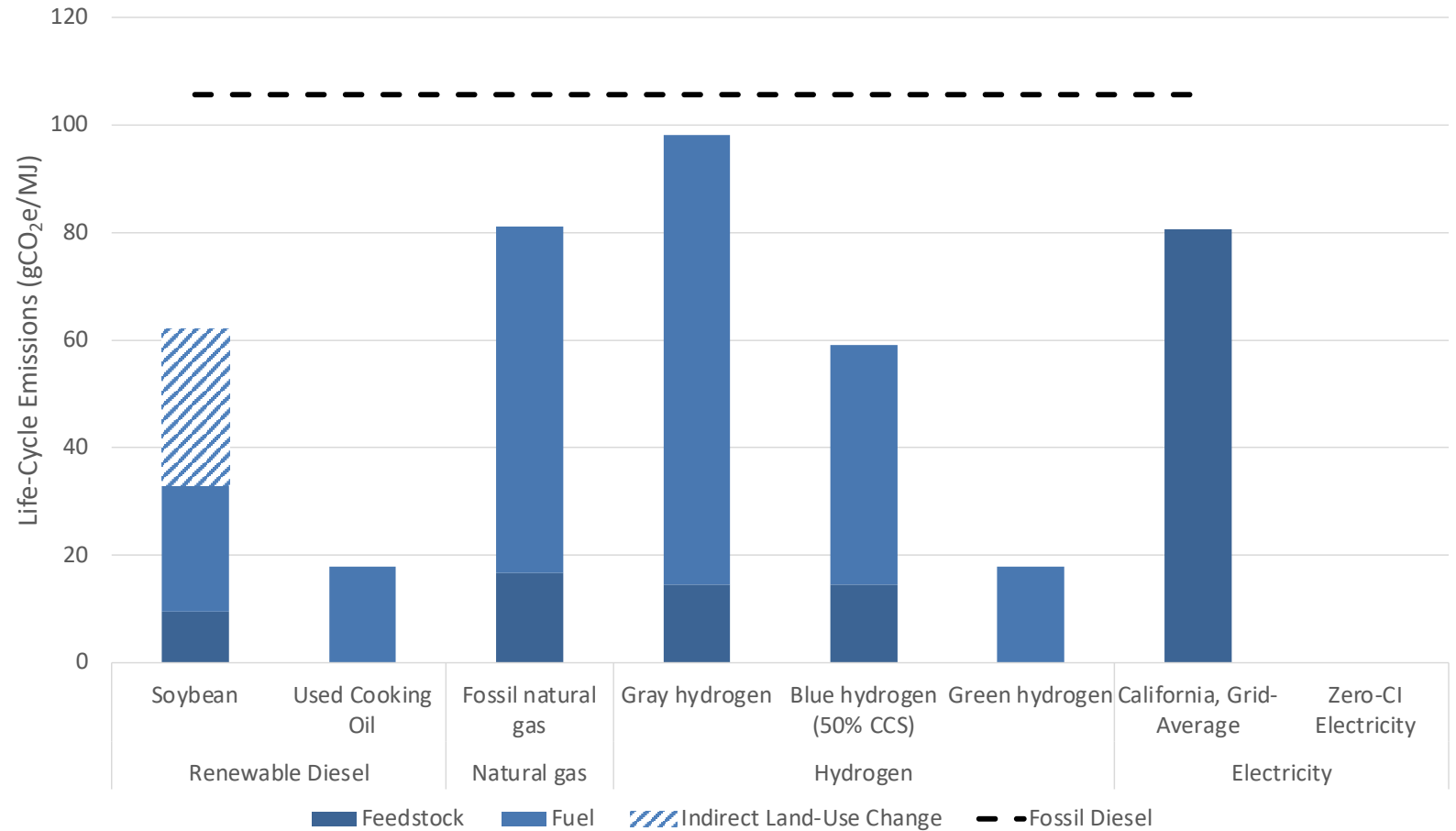
Upstream Emissions from Fuel Production

- Upstream emissions
- Fuels with zero tailpipe emissions can have significant upstream emissions (e.g., electricity, hydrogen)
- Land-use change can contribute significantly to upstream impacts of fuels produced using dedicated cropland



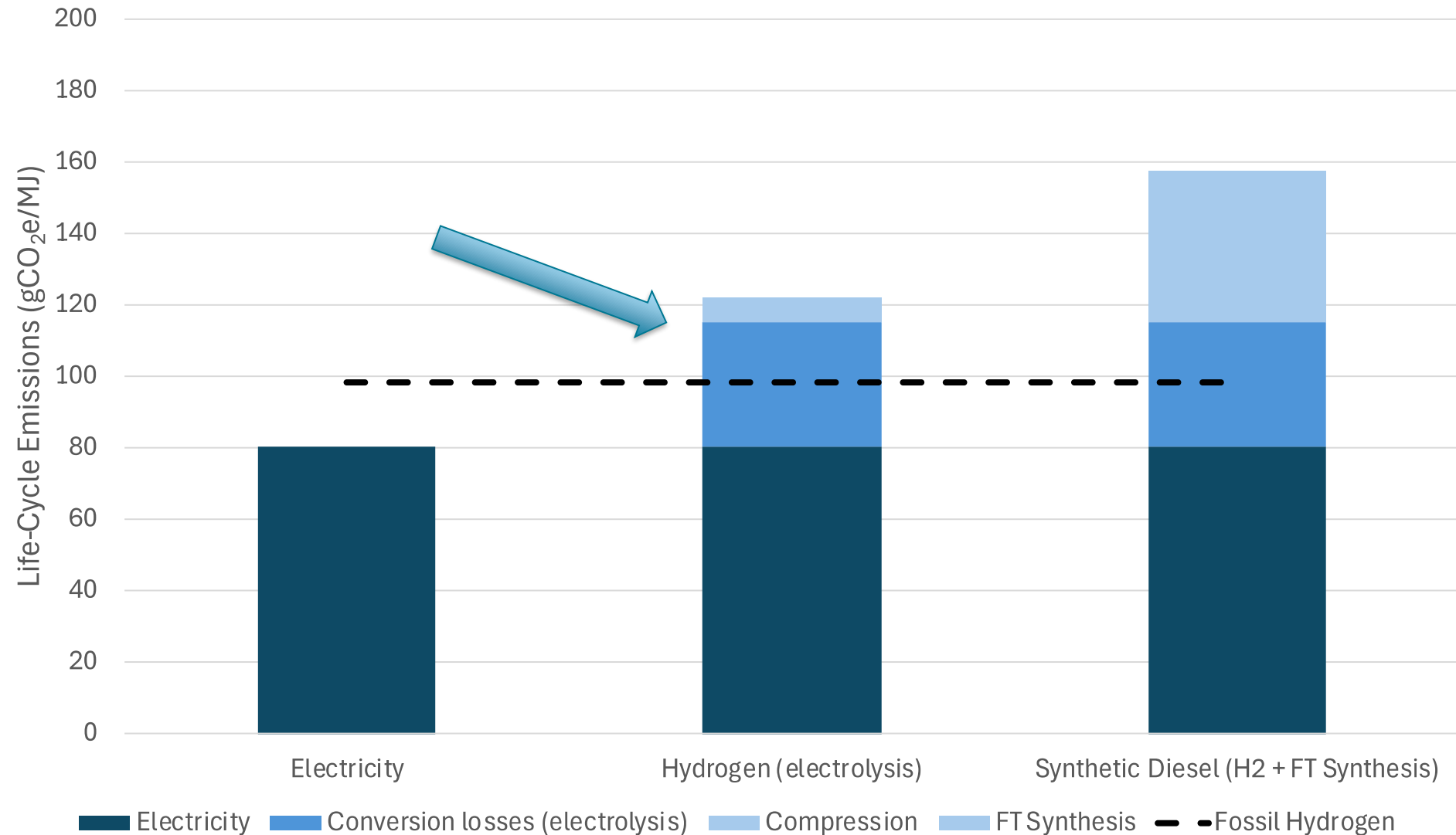
Comparison of Upstream Emissions Across Pathways

- LCA of alternative fuels can vary considerably
- Wastes & residues + renewable electricity tend to offer deepest GHG savings
- Upstream methane leakage may undercut GHG savings from natural gas pathways



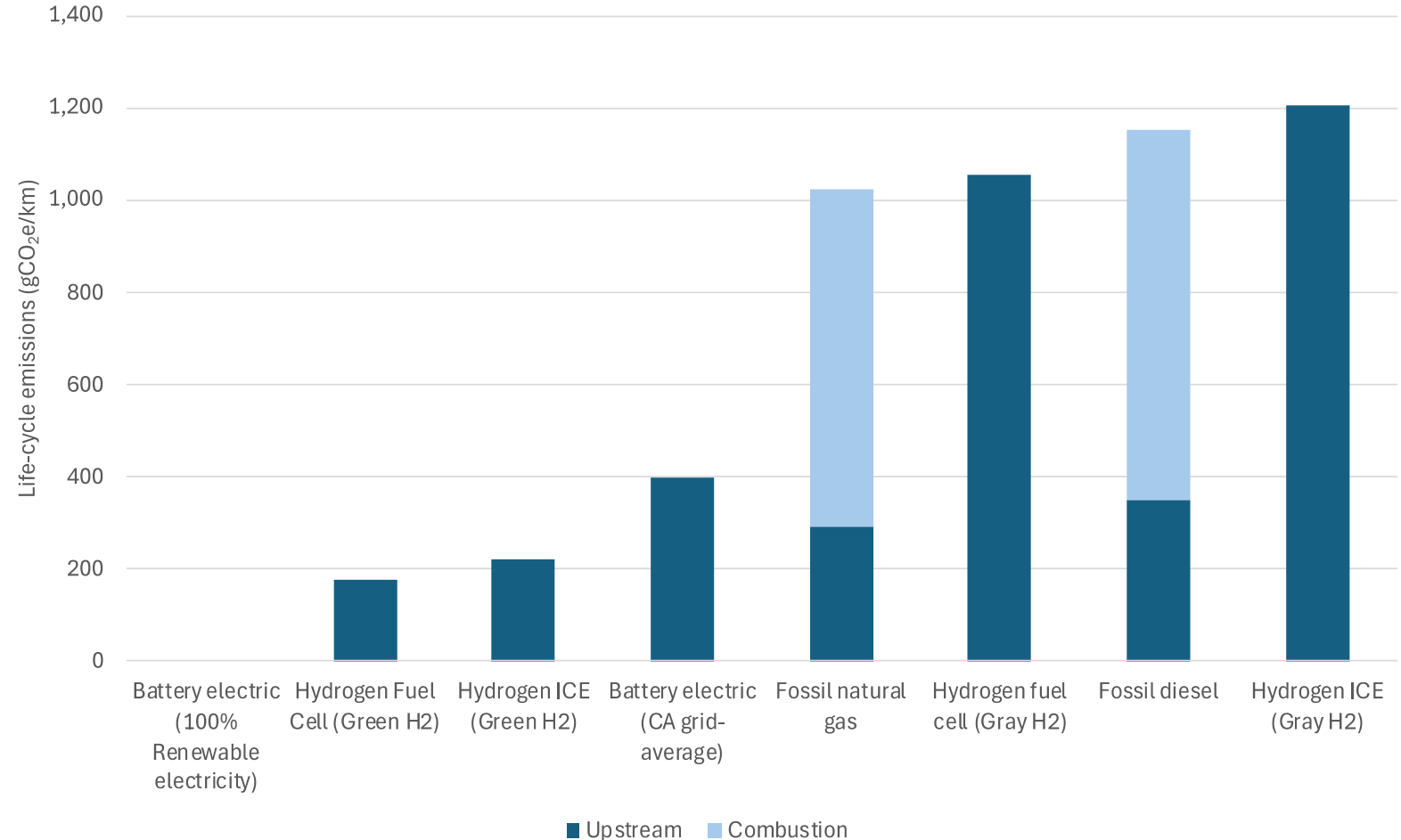
Adapted from: California-GREET_4.0

Efficiency Losses Compound for Hydrogen-Derivatives



Putting it All Together: Emissions in the Fuel-Vehicle Cycle

- All hydrogen-powered trucks have the potential to significantly reduce GHG emissions if powered by green H₂
- If powered by grey H₂, their life cycle emissions can be worse than diesel trucks.



Questions?
N.Pavlenko@theicct.org



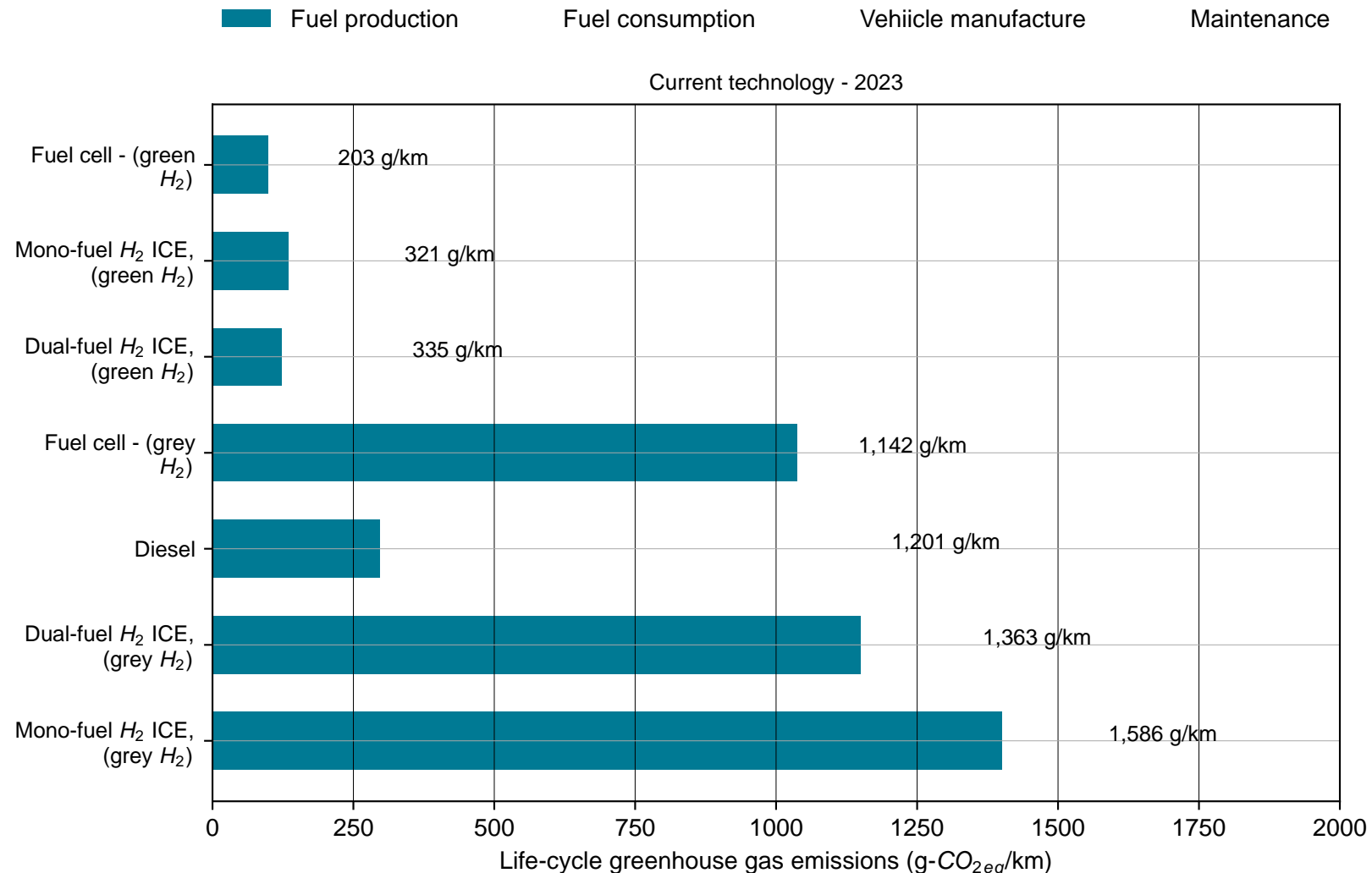
THE INTERNATIONAL COUNCIL
ON CLEAN TRANSPORTATION



Appendix Slides

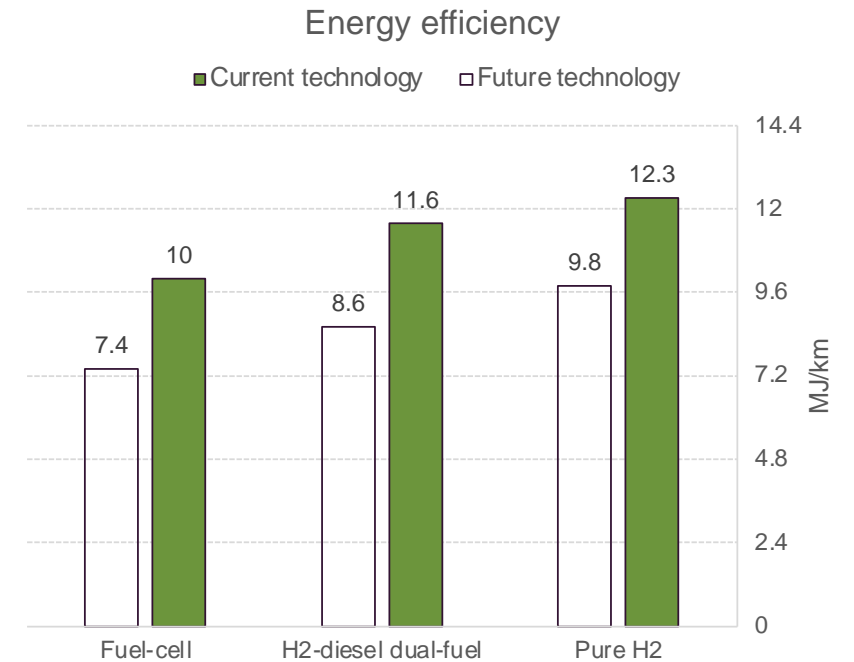
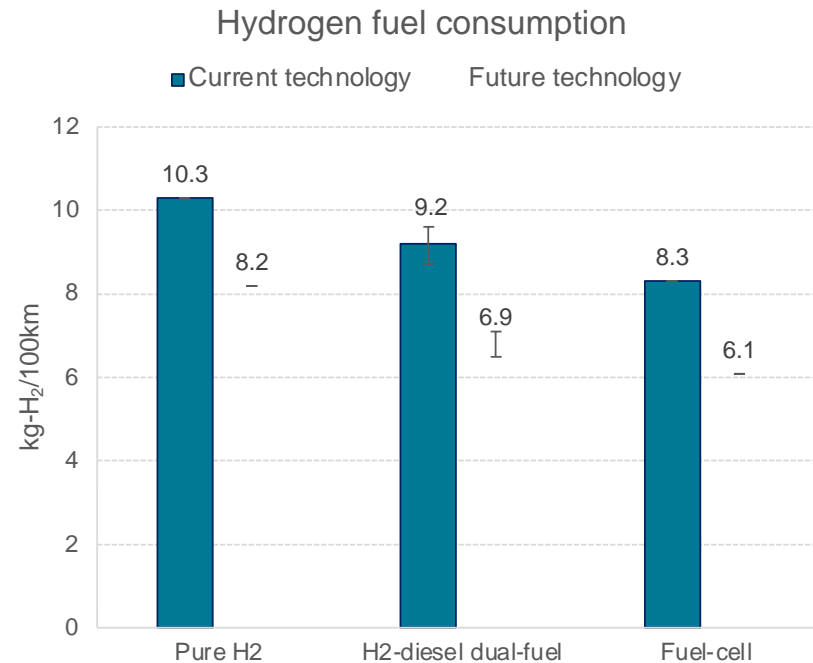
Putting it All Together: Emissions in the Fuel-Vehicle Cycle

- All hydrogen-powered trucks have the potential to reduce GHG emissions if powered by green H_2 (~ 80%) .
- If powered by grey H_2 , their life cycle emissions can be worse than diesel trucks.



Fuel economy and energy efficiency

- Some powertrain + fuel combinations have different efficiencies
- We can normalize based on efficiency to develop a consistent functional unit (e.g., gCO₂e/km)





Renewable Fuels Touchpoint

NACFE
Run on Less - Messy Middle
March 11, 2025

Jerome McCarville
Chevron

Cautionary statement

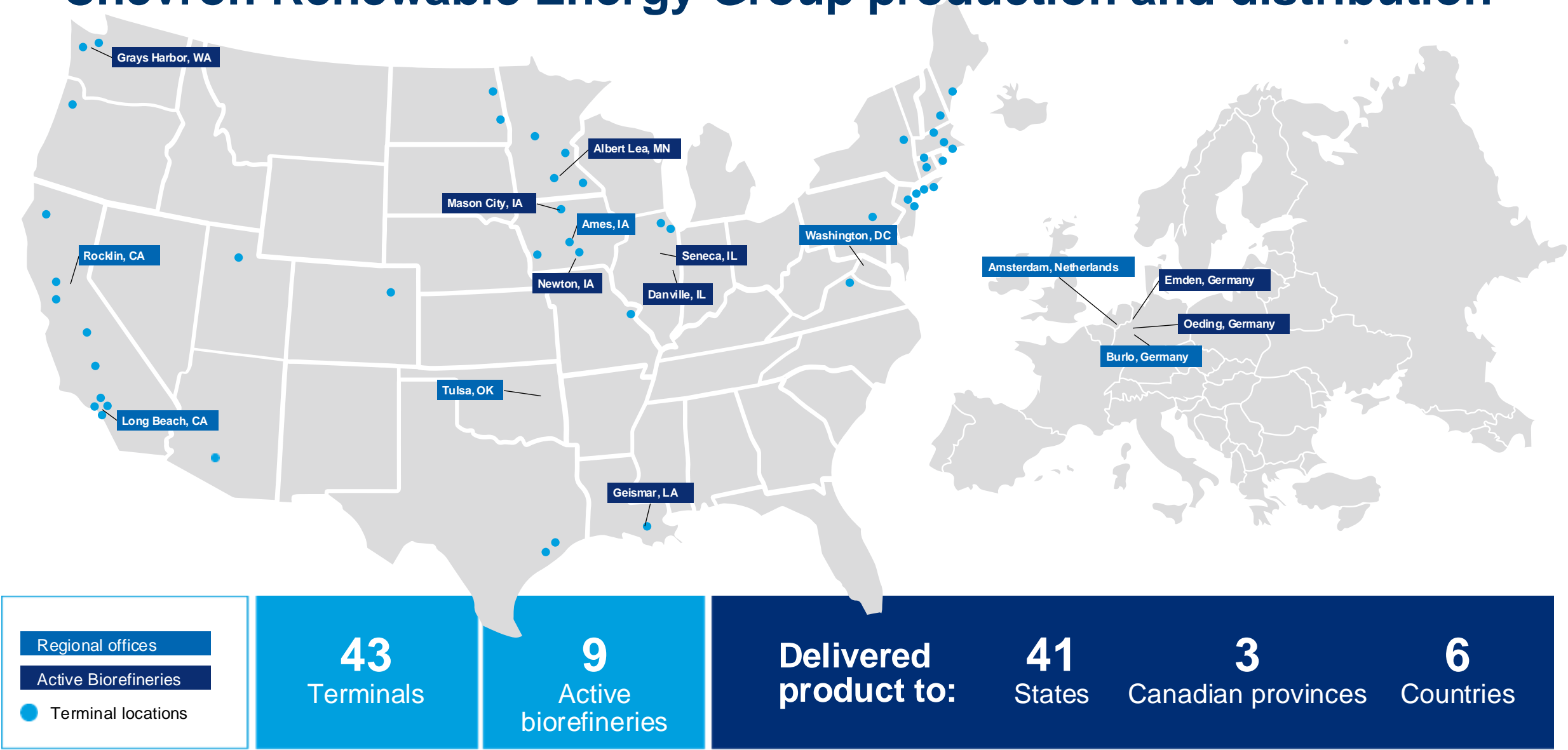
CAUTIONARY STATEMENTS RELEVANT TO FORWARD-LOOKING INFORMATION FOR THE PURPOSE OF “SAFE HARBOR” PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This document contains forward-looking statements relating to Chevron’s operations and lower carbon strategy that are based on management’s current expectations, estimates, and projections about the petroleum, chemicals, and other energy-related industries. Words or phrases such as “anticipates,” “expects,” “intends,” “plans,” “targets,” “advances,” “commits,” “drives,” “aims,” “forecasts,” “projects,” “believes,” “approaches,” “seeks,” “schedules,” “estimates,” “positions,” “pursues,” “progress,” “may,” “can,” “could,” “should,” “will,” “budgets,” “outlook,” “trends,” “guidance,” “focus,” “on track,” “goals,” “objectives,” “strategies,” “opportunities,” “poised,” “potential,” “ambitions,” “aspires” and similar expressions, and variations or negatives of these words, are intended to identify such forward-looking statements, but not all forward-looking statements include such words. These statements are not guarantees of future performance and are subject to numerous risks, uncertainties and other factors, many of which are beyond the company’s control and are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements. The reader should not place undue reliance on these forward-looking statements, which speak only as of the date of this report. Unless legally required, Chevron undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

Among the important factors that could cause actual results to differ materially from those in the forward-looking statements are: changing crude oil and natural gas prices and demand for the company’s products, and production curtailments due to market conditions; crude oil production quotas or other actions that might be imposed by the Organization of Petroleum Exporting Countries and other producing countries; technological advancements; changes to government policies in the countries in which the company operates; public health crises, such as pandemics and epidemics, and any related government policies and actions; disruptions in the company’s global supply chain, including supply chain constraints and escalation of the cost of goods and services; changing economic, regulatory and political environments in the various countries in which the company operates; general domestic and international economic, market and political conditions, including the military conflict between Russia and Ukraine, the conflict in Israel and the global response to these hostilities; changing refining, marketing and chemicals margins; the company’s ability to realize anticipated cost savings and efficiencies associated with enterprise structural cost reduction initiatives; the potential for gains and losses from asset dispositions or impairments; the possibility that future charges related to enterprise structural cost reduction initiatives, impairments and other obligations may be greater or different than anticipated, including as a result of unexpected or changed facts, circumstances and assumptions; actions of competitors or regulators; timing of exploration expenses; timing of crude oil liftings; the competitiveness of alternate-energy sources or product substitutes; development of large carbon capture and offset markets; the results of operations and financial condition of the company’s suppliers, vendors, partners and equity affiliates; the inability or failure of the company’s joint-venture partners to fund their share of operations and development activities; the potential failure to achieve expected net production from existing and future crude oil and natural gas development projects; potential delays in the development, construction or start-up of planned projects; the potential disruption or interruption of the company’s operations due to war, accidents, political events, civil unrest, severe weather, cyber threats, terrorist acts, or other natural or human causes beyond the company’s control; the potential liability for remedial actions or assessments under existing or future environmental regulations and litigation; significant operational, investment or product changes undertaken or required by existing or future environmental statutes and regulations, including international agreements and national or regional legislation and regulatory measures related to greenhouse gas emissions and climate change; the potential liability resulting from pending or future litigation; the risk that regulatory approvals and clearances related to the Hess Corporation (Hess) transaction are not obtained or are obtained subject to conditions that are not anticipated by the company and Hess; potential delays in consummating the Hess transaction, including as a result of the ongoing arbitration proceedings regarding preemptive rights in the Stabroek Block joint operating agreement; risks that such ongoing arbitration is not satisfactorily resolved and the potential transaction fails to be consummated; uncertainties as to whether the potential transaction, if consummated, will achieve its anticipated economic benefits, including as a result of risks associated with third party contracts containing material consent, anti-assignment, transfer or other provisions that may be related to the potential transaction that are not waived or otherwise satisfactorily resolved; the company’s ability to integrate Hess’ operations in a successful manner and in the expected time period; the possibility that any of the anticipated benefits and projected synergies of the potential transaction will not be realized or will not be realized within the expected time period; the company’s future acquisitions or dispositions of assets or shares or the delay or failure of such transactions to close based on required closing conditions; government mandated sales, divestitures, recapitalizations, taxes and tax audits, tariffs, sanctions, changes in fiscal terms or restrictions on scope of company operations; foreign currency movements compared with the U.S. dollar; higher inflation and related impacts; material reductions in corporate liquidity and access to debt markets; changes to the company’s capital allocation strategies; the effects of changed accounting rules under generally accepted accounting principles promulgated by rule-setting bodies; the company’s ability to identify and mitigate the risks and hazards inherent in operating in the global energy industry; and the factors set forth under the heading “Risk Factors” on pages 20 through 26 of the company’s 2023 Annual Report on Form 10-K and in subsequent filings with the U.S. Securities and Exchange Commission. Other unpredictable or unknown factors not discussed in this report could also have material adverse effects on forward-looking statements.



Chevron Renewable Energy Group production and distribution



Our story told in numbers



**420
MMGY**
nameplate
production capacity



8
active biodiesel
production facilities
1
renewable
diesel facility



708 MM
gallons sold in 2024



10
terminals in
California
39
fuel terminals
across U.S.



50,000+
truckloads in 2023
180+
water movements in 2023
7,500+
railcars loaded in 2023

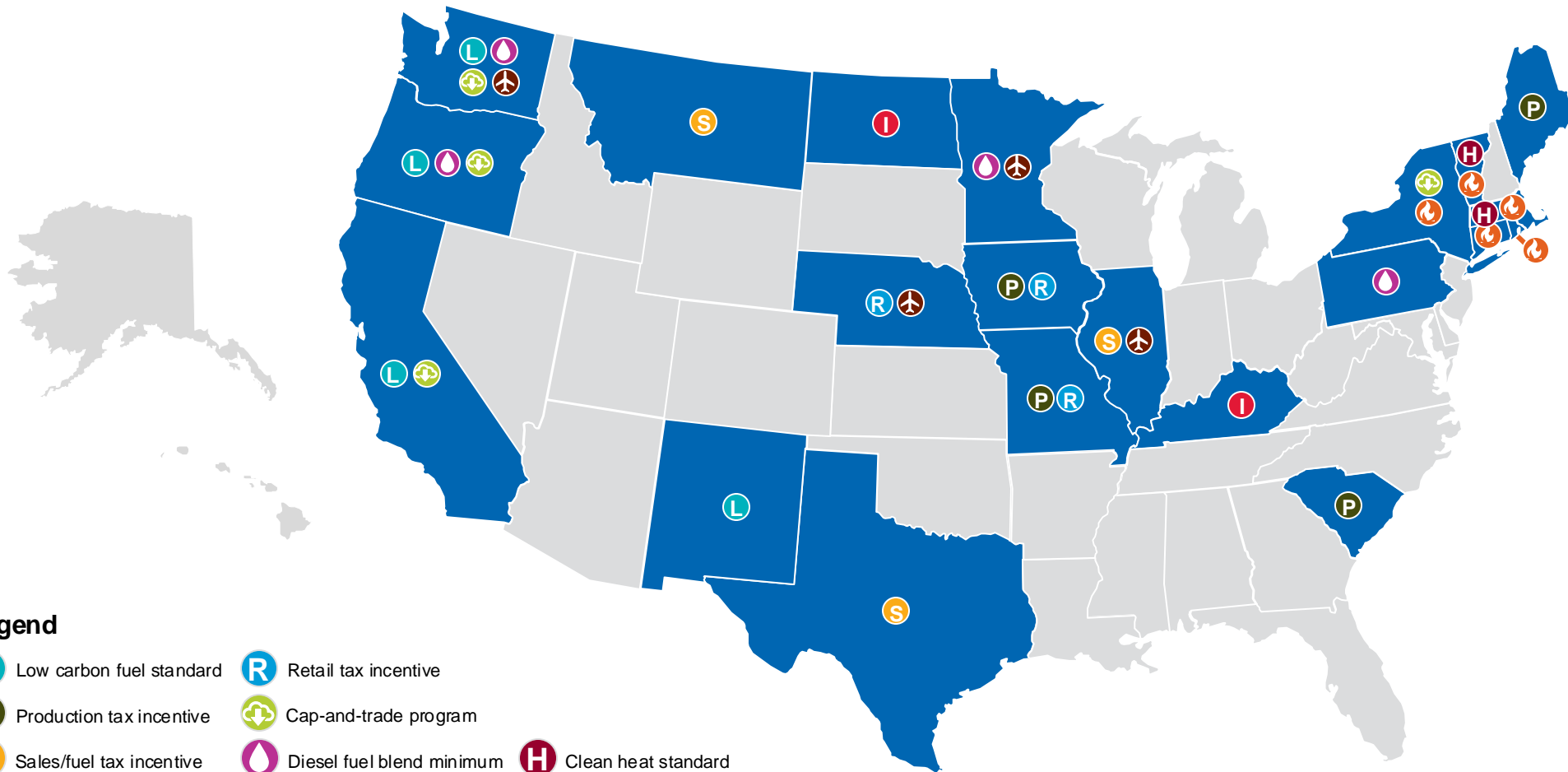


6
countries product
was sold to in 2023
41
states product was
sold to in 2023



Supportive biofuels policies at the U.S. state level

For biodiesel, renewable diesel and sustainable aviation fuel



Legend

- L** Low carbon fuel standard
- P** Production tax incentive
- S** Sales/fuel tax incentive
- I** Income tax incentive
- R** Retail tax incentive
- C** Cap-and-trade program
- D** Diesel fuel blend minimum
- H** Clean heat standard
- B** Heating oil blend minimum
- A** Sustainable aviation fuel incentive

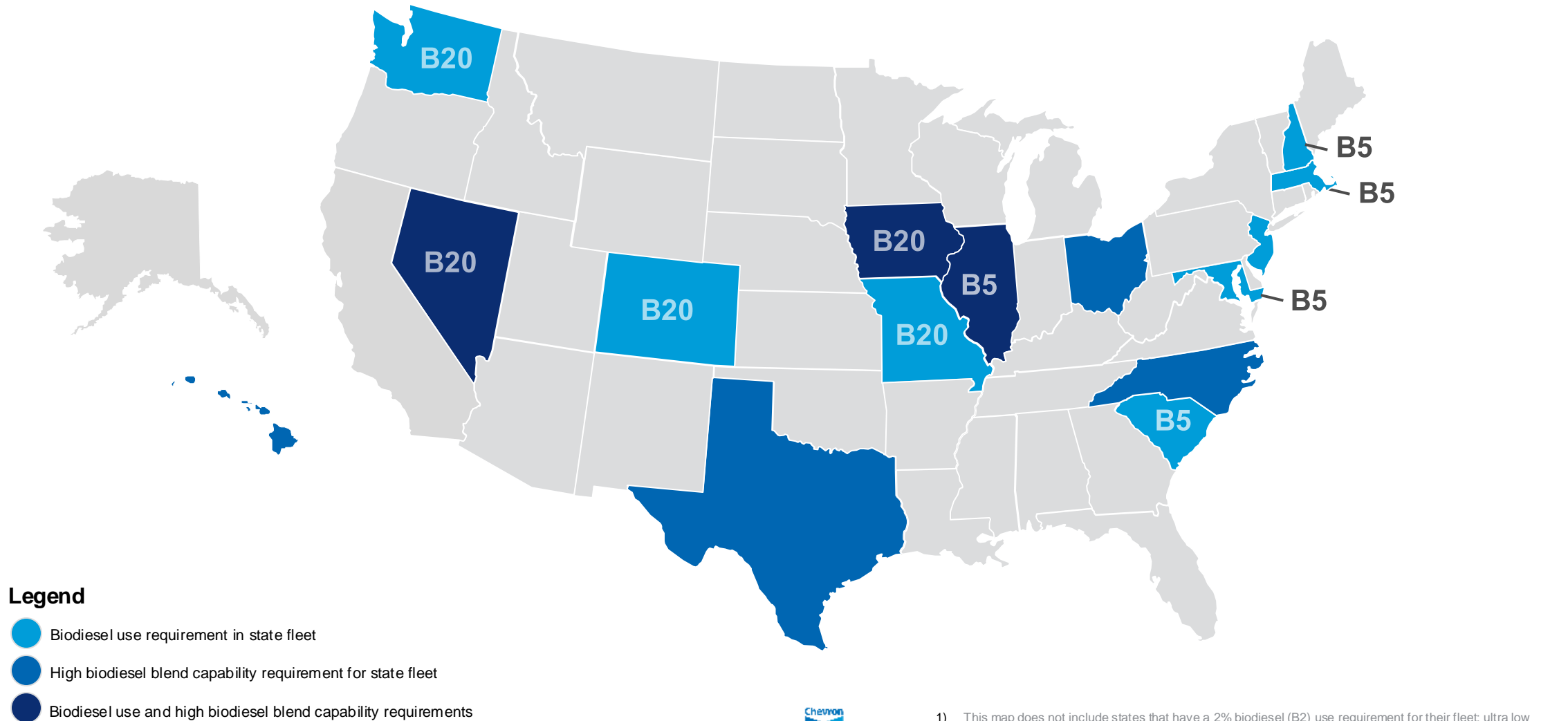
NOTE: LCFS and cap-and-trade includes states that have implemented OR that plan to implement regulations. New Mexico is working to implement an LCFS; New York and Oregon are working to implement cap-and-trade.



- 1) The Federal Renewable Fuel Standard is applicable to all U.S. states. The Blenders Tax Credit is a federal program that expires Dec. 31, 2024, and will be replaced by the Clean Fuel Production Credit.
- 2) This map does not reflect states that have but do not enforce a minimum biodiesel blend standard (for example, New Mexico), or state incentives for ethanol or other biofuels.
- 3) Source: U.S. Department of Energy Alternative Fuels Data Center (<https://afdc.energy.gov/fuels/laws/BIOD>)

States with policies to enable biodiesel use in their fleets

Sets minimum blend use and/or fleet buying guidelines for state agencies



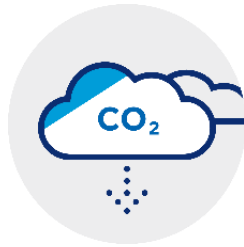
Benefits of biodiesel

Oxygenated fuel



Adaptable lower carbon fuel

High-quality
biofuel for use
in most conventional
diesel applications



Lower engine emissions

Oxygen in fuel molecules
helps engine burn
fuel more completely
and can reduce
tailpipe emissions



Non-toxic and non-hazardous

Safety requirements
for transport and
handling of B100
are comparable to
vegetable oil



Highly blendable

Can be blended
at various levels
with diesel and
biodiesel for lower
carbon options that
provide greater
customer choice



Enhanced lubricity

No lubricity
additives are
needed when
BD is blended
with ULSD or RD
at 2% or higher



¹ Product is produced from renewable oils and fats. Methanol used to make biodiesel and hydrogen used to make renewable diesel and SAF are typically made from conventional natural gas but can be produced from renewable resources.

² CARB Assessment of the Emissions from the Use of Biodiesel as a Motor Vehicle Fuel in California "Biodiesel Characterization and NOx Mitigation Study", Durbin (2011)

Benefits of renewable diesel

Paraffinic fuel



High quality drop in fuel

Can serve as a direct replacement to petroleum diesel with stringent quality standards that exceed ASTM, CEN and CGSB specifications



Ultra-high Cetane

Cetane number above 65 indicates enhanced engine combustion that helps reduce engine emissions



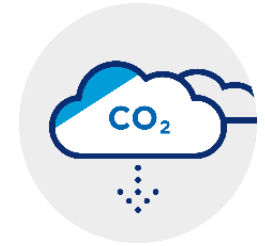
Desirable cloud point

Consistent cloud point is typically less than -10 °C and similar to winter pipeline specification limits for petroleum diesel at around -10 °C



Highly blendable

Can be blended at virtually any level with diesel and biodiesel for fuel options that provide greater customer choice



Lower engine emissions

Compared to petroleum diesel, RD can reduce engine emissions by:

- Up to 100% for fossil carbon¹
- Up to 30% for particulate matter²
- Approximately 15% for nitrogen oxides (NOx)²



¹ Product is produced from renewable oils and fats. Methanol used to make biodiesel and hydrogen used to make renewable diesel and SAF are typically made from conventional natural gas but can be produced from renewable resources.

² CARB Assessment of the Emissions from the Use of Biodiesel as a Motor Vehicle Fuel in California "Biodiesel Characterization and NOx Mitigation Study", Durbin (2011)

Benefits of biodiesel and renewable diesel are synergistic

Blended BD/RD allows for reduced carbon intensity today in virtually any diesel application

Complementary benefits of the two fuels

- BD provides lubricity, density and elastomer swell
 - RD provides NOx reduction and cetane
- 50/50 blend is most similar to petroleum diesel in fluid properties

Benefits of blended BD/RD fuel

Carbon Intensity (CI) scores that are lower than petroleum diesel allow for emissions carbon intensity reduction today

BD/RD blends can have lower freezing points than straight RD

BD/RD blends can provide one of the lowest overall engine emissions of any diesel fuel option

Elastomer swell, density and bulk modulus properties of BD/RD blends are a better match for conventional diesel than straight renewable diesel





Geismar improvement and expansion project

Total site production annual capacity will increase from 90 million gallons to 340 million gallons

Enhanced marine logistics that will enable global trading of feedstocks and fuel

Expected to be complete Q1 2025

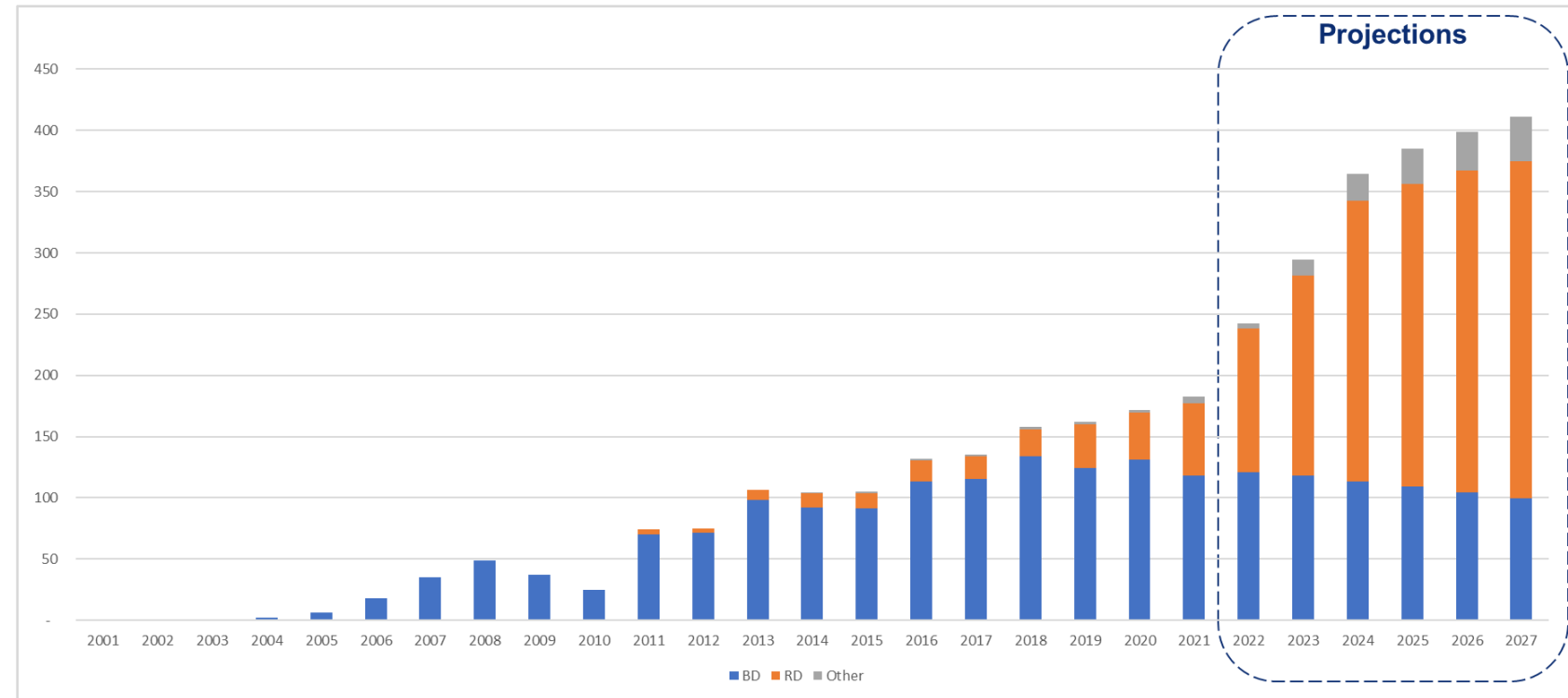


Growth of the renewable fuels industry is expected to continue

The last several years have seen growth of the biofuels industry, specifically in the renewable diesel space

Supportive national and state policy will continue to drive growth of the industry

Historic Production and Outlook of Biofuels in the US (MBD)



Footnotes for 2001-2021

- 1) MBD- Thousands of Barrels a Day
- 2) Data Source- [EIA.gov](https://www.eia.gov)
- 3) Other biofuels include renewable heating oil, renewable jet fuel (SAF), renewable naphtha, and renewable gasoline.
- 4) EIA timeline is ~2 years for actual production results to be reported
- 5) Calculation to mbd assumes 330 days of production

Footnotes for 2022-2027

- 1) MBD- Thousands of Barrels a Day
- 2) Data Source- [EIA.org](https://www.eia.gov)
- 3) Other only includes SAF- Sustainable Aviation Fuel
- 4) Projections use a base case scenario, the accelerated case is not included in the projected production.
- 5) Calculation to mbd assumes 330 days of production



The bio-based diesel industry has continued to grow

The U.S. bio-based diesel industry reached a record

5 billion gallons

of consumption in 2024¹



CNG station growth





the human energy company[®]



Jerome McCarville
Manager, National Accounts

Jerome.McCarville@Chevron.com

515.480.7257

RNG for Heavy-Duty Trucking

Infrastructure, pricing, and availability





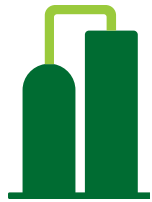
Agenda

RNG for transportation

Infrastructure

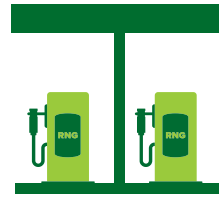
Price considerations

Resources



RNG Supply

- Dairy/RNG production
- 3rd party RNG supply contracts
- Partnerships with major energy leaders (Chevron, bp, TotalEnergies, & Tourmaline)



Distribution

- 600+ stations (U.S. & Canada)
- Capacity to double volumes
- 50,000+ vehicles fueling daily
- 1,000 fleet customers
- Maintenance + construction



Clean Energy

- Vertically integrated RNG solutions
- 25+ years of experience
- Pioneered RNG as a commercial fuel

What is renewable natural gas (RNG)?



When organic waste decays, it naturally produces methane gas or “biogas” which can be processed and purified into RNG.

Because RNG is derived from a naturally occurring process that does not add new carbon into the atmosphere, its emissions are considered “**biogenic**,” resulting in emissions reporting benefits for end users.



Where does RNG come from?



Decomposing organic waste sources (feedstocks) that release methane gas or biogas into the atmosphere.



Landfill



Waste water



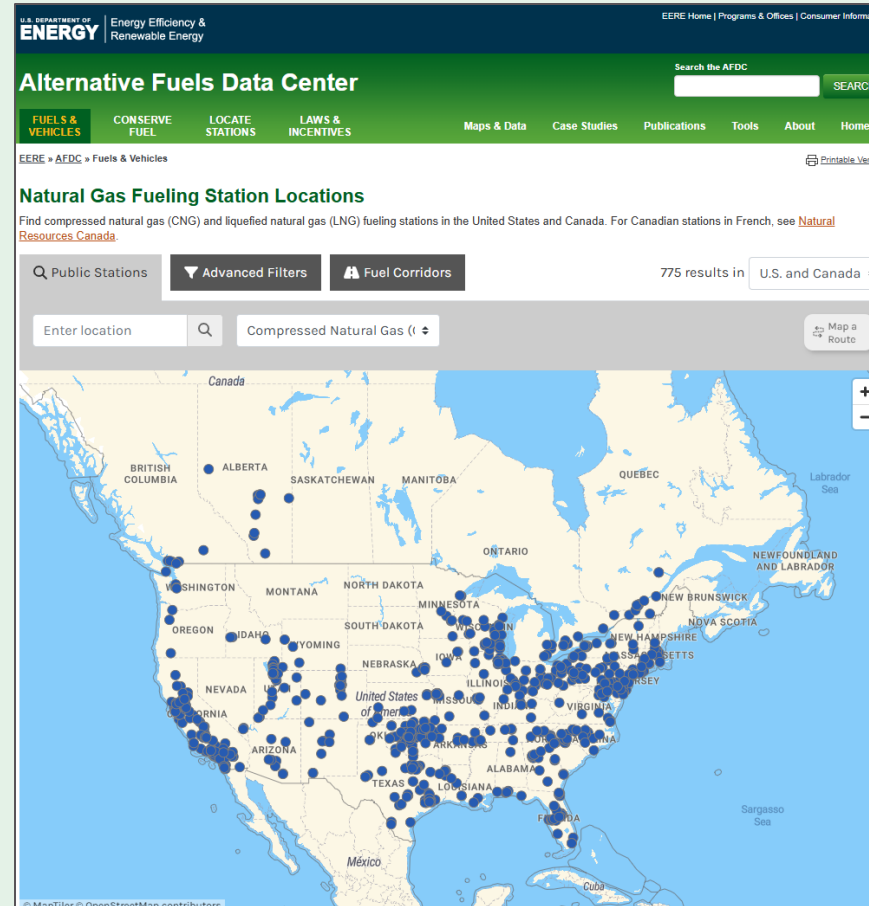
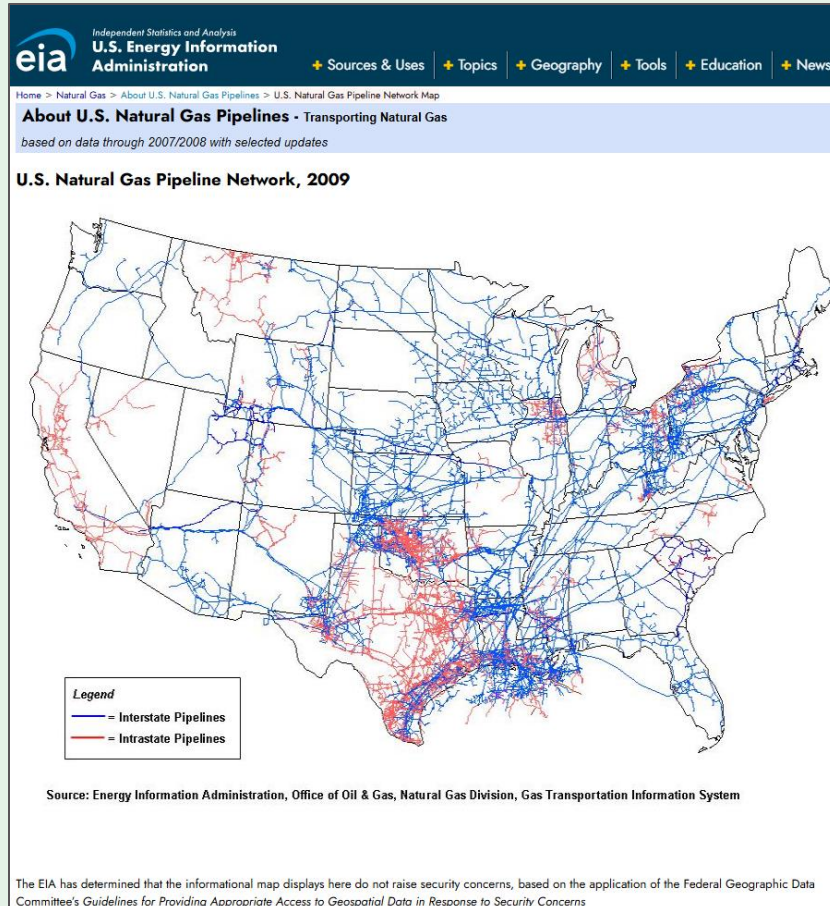
Livestock Manure



How is RNG made?



Natural gas transportation in the US



Clean Energy's
station locator map:
cnglngstations.com

Clean Energy RNG station: Davenport, FL



RNG fast-fill



Pros

- Typically built for 10 GGE/minute
 - Similar experience to diesel fueling
 - All major fleet, credit, and CE fuel cards accepted
-

Cons

- Tanks fill 85% due to heat of compression
- Possible queuing delays
- Fleet may have to go off-route



RNG time-fill



Pros

- Eliminates labor of fueling
- Tanks fill nearly to 100%. Because many trucks are fueling over a longer period, less heat buildup from fast-fill compression.

Cons

- Station designed to fuel many slowly, not singles quickly (fast-fill post or dispenser add is an option however)
- Requires dedicated parking and real estate
- More equipment to maintain



Major equipment



- Local utility natural gas / electric utilities
- Natural gas dryer
- Compressors
- Switchgear
- Motor control center
- High pressure storage
- Valve panel
- Canopy
- Dispensers or time-fill hoses, posts, and nozzles
- Point of sale system (public)



Need your own infrastructure?



Private RNG station basics:

- Minimum equipment footprint is 30' x 40'
- 10' off property lines
- Access to natural gas pipeline & utility power
- Purchase, finance, or lease:
 - \$1–\$4 million
 - 5–15-year finance or lease
 - Volume price breaks
 - Fuel private or public
- Timeline 9–12 months



RNG station and fuel economics



Station and fuel economics

- ~\$3M investment for station to fuel 50–100 tractors
- 30C federal tax credit up to \$100K in eligible community
- ~\$2 per GGE fuel cost before credits
- Cost factors:
 - Compression
 - Commodity
 - Transport
 - Taxes

RNG credits

- Clean fuel “carrot & stick” regulating big oil & incentivizing clean fuel producers through deficit and credit generation and sales programs
- Federal Renewable Fuel Standard – RNG generates D3 RINs
- State Low Carbon Fuel credits (CA, OR, WA, NM)

CNG/LNG credits

- Federal alternative fuel tax credit \$0.50 per GGE (2006–2024)
- Extension in 2025 and beyond possible
- \$1 per gallon RNG

credit proposal

RNG tractor incentives and grants



\$10k Clean Energy customer
OEM/dealer incentive

Grants available in a dozen or more states

Up to \$50k Clean Energy buydown
for new California RNG tractors & fueling

More info at: cleanenergyfuels.com/fleets

Peterbilt DEALER BULLETIN

SUBJECT: X15N Natural Gas and Clean Energy Fueling Rebate DB # 24-14
DATE: 08-13-24

Peterbilt is excited to announce in conjunction with a signed Natural Gas powered Peterbilt signed Clean Energy fueling agreement, qualifying X15N vehicle.

To receive the \$10,000 rebate, present evidence of the signed agreement to the Company for each qualifying vehicle.

Cummins Clean Fuel Technology Compressed Natural Gas (CNG) placed from June 1, 2024, tiered discount pricing details.

Requirements:

- New Orders with Requested Delivery Date
- Submit the Clean Energy Fueling Agreement to Maria.Sommerfeld@peterbilt.com
- 1/1/2024 Price List
- Package orders
- This program may be cancelled at any time.
- Orders are accepted on a first-come, first-served basis.
- Units may not be returned.
- This program may be discontinued at any time.
- Peterbilt reserves the right to cancel the promotion at any time.
- Peterbilt reserves the right to change the promotion at any time.
- Previously invoiced units are not eligible.

KENWORTH THE WORLD'S BEST. TRUCK SALES BULLETIN

TE2926 - X15N CNG

What's New

September 17, 2024. Kenworth is excited to announce the launch of the new X15N Natural Gas units purchased in California. Customers who purchase a new X15N Natural Gas unit by the end of 2024 will be eligible for a \$10,000 Net Sale Price Rebate.

The \$10,000 rebate will be administered through the invoice. To receive the rebate, the customer must provide a signed Clean Energy Fueling Agreement with Clean Energy Fuels on the Dealer Truck Purchase Order.

In addition to the Clean Energy Fueling Agreement, Kenworth Technologies (CCFT) will provide systems paired with X15N engine 12/31/2024. Applicable taxes and please reach out to your CNG fueling partner.

The California RNG Fleet Fund

To help California fleets transition to renewable natural gas (RNG), Clean Energy Fuels is incentivizing the purchase of Kenworth T680 and T880 X15N trucks that fuel at our stations.

Sustainable
Clean Energy provides negative carbon-intensity RNG at all our participating California stations.

Affordable
Pay as low as \$3 per gallon of RNG with flexible discount structures and fuel card payment options.

Convenient
Our statewide fueling network includes 20+ fast-fill, tractor-trailer friendly stations throughout California.

Measurable
We'll provide customers with annual reports on their carbon intensity and emissions reduction.

Clean Energy **KENWORTH** **INLAND INLAND KENWORTH**

Clean Energy's X15N demo program



- 2025 Peterbilt 579 RNG day cab
- Cummins X15N engine
- 175 DGE back-of-cab fuel system
- 2-week trial period
- Fuel at Clean Energy stations
- Fleets that have already participated:





Developed in partnership with the
Natural Gas Vehicle Institute (NGVi)®

Designed to make the operational
transition to NGVs easy and seamless

Training platform for fleet managers,
supervisors, and technicians

Ensures a successful vehicle launch
and provides continued support
throughout the first year



National customers



WASTE CONNECTIONS, INC.



More than just fuel: turnkey solutions



**RNG, CNG & LNG
fueling services**



**RNG supply
investment**



Grants & financing
\$655M in awards



**Compressors
& equipment**



**Engineering
& construction**
770+ projects



**Facilities
modification**



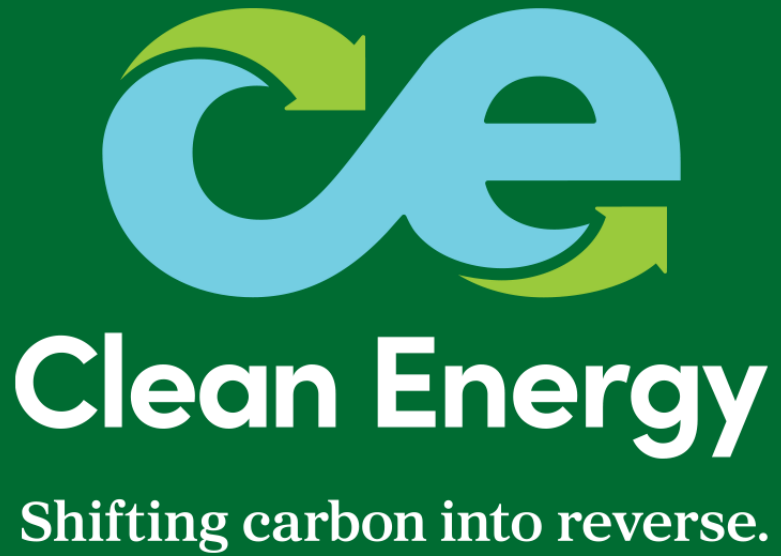
**Low-carbon
RNG**



**Environmental
credit generation
& monetization**



24/7 service & support
150+ station operations
personnel



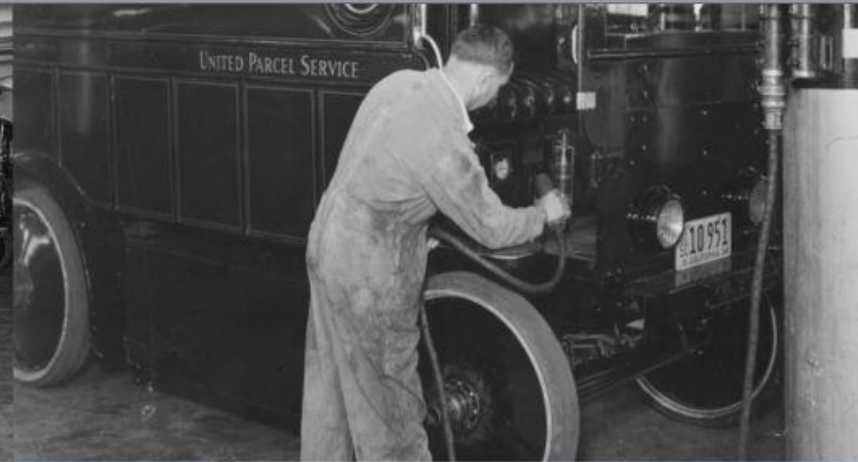
Derek Turbide

Vice President, Business Development

dturbide@cleanenergyfuels.com

949.437.1305

CleanEnergyFuels.com



UPS has been leading
sustainable fleet
innovations for decades



Environmental Sustainability Goals

Achieve carbon neutrality by 2050

By 2025



40% alternative fuel used in our ground operations



25% renewable electricity powering our facilities

By 2035



30% sustainable aviation fuel (SAF) in our air network



50% reduction in CO₂ per package delivered (2020 baseline)



100% renewable electricity powering our facilities

Guiding Principles



Lead with integrity



Holistic vision of sustainability



Deliver impact, not just promises



Delink growth from GHG emissions



Take a fiscally-responsible approach based on sound engineering principles

Company goals are aspirational and not guarantees or promises that all goals will be met, due to dependence on technological innovations and other available resources needed to drive environmental change. Statistics and metrics relating to ESG matters are estimates and may be based on assumptions or evolving standards.

Global Alternative Fuel & Advanced Technology Vehicles

Total Vehicles (U.S. & International): 19,000+

United States Fleet:

- Compressed Natural Gas Vehicles
- Liquid Natural Gas Vehicles
- Hybrid Electric Vehicles
- Electric Vehicles
- Propane Vehicles
- Electric Bikes



International Small Package Fleet:

- Propane Vehicles
- Compressed Natural Gas Vehicles
- Electric Vehicles
- Electric Bikes
- Ethanol Vehicles
- Liquid Natural Gas
- Hybrid Electric Vehicles



Zero - Near Zero Building



Summary

UPS is committed to Carbon Neutral by 2050.

- Aggressive goals based off UPS's 2020 baseline emissions.

UPS continues to grow its industry leading Advanced Technology and Alternative fueled fleet.

16% last year with more significant growth planed in 2025.

All the Above approach to low carbon solutions.

Rolling Laboratory is an opportunity to test and validate emission reductions in real world applications.

Energy agnostic: from human power to hydrogen, all solutions are needed in the efforts to reduce emissions.

From trash to transportation fuel = Biomethane.

Methane is 80x more potent at warming the atmosphere than carbon.

RNG is an elegant carbon-negative solution that makes a difference today.





THANK YOU



*First Electric UPS Delivery Vehicles, Los Angeles
California, 1936*

Future Prices & Availability of Existing Infrastructure: What's Next?



Ryan Bankerd

*Global Director of Automotive
Sustainability
UPS*



Jerome McCarville

*Manager, National Accounts
Chevron Renewable Energy
Group*



Nik Pavlenko

*Programs Director, Fuels and
Aviation
International Council on Clean
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Derek Turbide

*Vice President of Renewable
Natural Gas Solutions for
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Clean Energy Fuels*





DIESEL



NATURAL GAS



BATTERY ELECTRIC



HYDROGEN FUEL CELL



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