

# 2023

ngvamerica.org

# Annual REPORT





# President's MESSAGE



## *NGV America Members and Colleagues:*

I am proud to present this 2023 Annual Report. Concluding our thirty-fifth year, NGV America remains a leader in the development of a growing, profitable, and sustainable market for vehicles, ships and carriers powered by ultra-low carbon fuels like renewable natural gas and hydrogen.

Our roughly 200 member companies produce, distribute, and market natural gas and biomethane across North America, manufacture and service natural gas vehicles, engines, and equipment, and operate fleets powered by clean-burning gaseous fuels.

Our successes highlighted in these pages were the result of careful planning and strategy, efficient and effective implementation, and industry consensus and cooperation that only comes from strong leadership. I thank our Board of Directors, Executive Committee, and Officers for their active participation, tenacity, and dedication.

Special thanks to Clean Energy Fuels' Mitchell Pratt – a previous Board Chair – for stepping in to serve as 2023 Chair after an unexpected vacancy, and welcome to recently elected Chair Marty Tufte of WM. Our association and industry remain in strong leadership hands.

We have an exciting transition before us in 2024. More to come soon...

Daniel Gage  
NGV America



# Chair's MESSAGE



*Dear Industry Colleagues,*

NGVAmerica has led in the transportation space since its inception three-plus decades ago.

This coming year we'll advance RNG fueling through expanded tax credits and infrastructure build out; address gas quality to affect emerging hydrogen blending practices and protect existing NGV investments; support fleet transition through effective codes, standards, and shared best practices to ensure safety and success; and implement an organizational rebrand to grow fleet membership and develop more approachable advocacy.

Commercial vehicles fueled by clean, affordable, and domestic gaseous fuels are an important part of the climate change solution. Fleets can achieve net zero now with RNG and NGVAmerica.



Join us!

A handwritten signature in black ink that reads "Marty Tufte".

Marty Tufte  
WM  
Chair

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# Advocate

## Interest in RNG Tax Credit Grows

Efforts to create a new \$1.00/gallon motor fuel tax credit for renewable natural gas (RNG) reached new heights in 2023. In April, House Ways and Means Committee members Reps. Linda Sanchez (CA-38) and Brian Fitzpatrick (PA-01) reintroduced the Renewable Natural Gas Incentive Act as H.R. 2448. A Senate co-sponsor to join North Carolina Senator Thom Tillis on a Senate companion bill is still being sought.

NGVamerica spent the year educating Members of Congress and staff on the environmental and economical impacts of RNG and the transformative effect of the proposed credit. In December, NGVamerica and the Moving Us Forward Coalition submitted to the House Committee on Ways and Means and Senate Committee on Finance a letter endorsed by over 200 diverse businesses and organizations urging congressional support and swift passage of H.R. 2448.

H.R. 2448 would establish a \$1 per gallon tax credit for renewable natural gas used in transportation, a move applauded by industry leaders for its potential to significantly contribute to a cleaner and more sustainable future. This incentive builds upon the success of the existing alternative fuel tax credit (AFTC), which presently offers a 50-cent credit for natural gas used in transportation and is set to expire December 31, 2024. NGVamerica will work to establish the \$1.00/gallon RNG credit and extend the AFTC during the 2024 legislative session.

## FY 2024 Appropriations

NGVamerica supported an increase to the U.S. DOE Vehicle Technologies Office to address technical barriers to the increased use of natural gas vehicles, with a focus on those utilizing renewable natural gas. We submitted requests through Senator Cassidy's office and Representative Fleischmann's office. Both are key appropriators. As of this writing, the FY2024 Appropriations have not been completed.

## Alternative Fuel Corridor Designations

The Bipartisan Infrastructure Law enacted in 2021 provided funding for alternative fuel infrastructure for the first time. The Federal Highway Administration (FHWA) is developing guidance and rules for the new funding initiatives, and on October 10th FHWA made new designations. The designations in 2023 mostly involved "corridor-pending" designations as opposed to "corridor-ready" designations. New CNG designations were made for several routes in Arkansas. There were 13 total new hydrogen designations, but all were "corridor-pending." Overall, it appears that the pace of designations slowed in 2023.

# Advocate

## Clean School Bus Funding

The Clean School Bus Program was signed into law on November 15, 2021, as part of the Bipartisan Infrastructure Law, providing \$5 billion over five years (FY 2022–2026) for the replacement of existing school buses with clean school buses and zero-emission school buses.

Half is dedicated to zero-emission school buses and half for clean school buses, a designation that includes natural gas technologies. EPA may make awards up to 100 percent of the cost of the replacement bus and charging or fueling infrastructure.

Despite the eligibility of CNG buses, most program funds have gone to electric school buses. This is due in part because the program is structured so that electric buses receive much larger grants and because options for new natural gas school buses now are limited.

## FTA Low-No Program Grants

The Federal Transit Administration’s Low-No transit bus program was created through the FAST Act of 2015 to support the purchase or lease of low- or no- emission vehicles that use advanced technologies to help improve air quality and combat climate change. FTA, however, would not consider natural gas bus applications until NGV America initiated a multi-year effort to secure language into annual federal appropriations bills that “directs the FTA to implement 49 U.S.C. 5339(c) in a manner that encourages a variety of different fuel types and consider procurements that reduce an agency’s overall greenhouse gas emissions.”

Natural gas grant applications received their first Low-No funding in FY 2022. In 2023, the FTA awarded over \$233.76 million funding to compressed natural gas bus transit projects across the country. Another \$44.37 million went to transit agencies where at least a portion will be spent on CNG buses and infrastructure. Of notable awards, Sun Tran in the City of Tucson (AZ) received \$21.49 million; Dallas Area Rapid Transit (TX) \$103 million; Metropolitan Transit Authority of Harris County (TX) \$40.4 million; the Utah Transit Authority over \$17 million; and Loudon County, VA \$13.88 million. The funding will be used for new CNG buses, fueling infrastructure, and associated maintenance facility improvements.



Clean Energy Fuels’ Eme Torlai (far left) and Sherika Moore (far right) present the Jacksonville Transportation Authority with NGVA’s 2022 Achievement Award at its October Board Meeting. Representing JTA are Board Chair Debbie Buckland (center left) and CEO Nathaniel Ford (center right).



# Advocate

## U.S. Environmental Protection Agency Regulatory Activities

2023 was a very active year at EPA. In the Spring the agency released its proposed “Phase 3 Greenhouse Gas Emissions Regulations for Medium- and Heavy-Duty Vehicles”. The rules as proposed take effect beginning in 2027 and will require significant reductions in greenhouse gas emissions. Based on proposed levels, it is expected that manufacturers would have to sell an increasingly larger percentage of zero emission vehicles to satisfy the requirements. EPA also issued a similar proposal for light-duty vehicles. NGV America submitted comments in June and July on the proposals, urging the Administration to recognize the emission benefits of natural gas vehicles fueled by RNG. In extensive comments, we proposed that the Administration provide a carbon correction factor for purposes of certification that is reflective of the significant quantities of RNG being used by natural gas vehicles. The Biden Administration is likely to try and complete this and other major rulemakings before the end of 2024.

## NHTSA Fuel Economy

In July, the National Highway Traffic Safety Administration (NHTSA) proposed tightening fuel economy standards for passenger cars, light trucks, heavy-duty pickup trucks, and work vans. NHTSA’s proposal is intended to complement the EPA’s proposed greenhouse gas regulations. NGV America submitted comments in October urging NHTSA to work with EPA to ensure that the fuel economy incentives called for in the Alternative Motor Fuels Act are matched by similar incentives in the EPA greenhouse gas regulations. NHTSA’s regulations in fact provide significant fuel economy credits for alternative fuel vehicles including natural gas-powered vehicles. However, there currently is no similar credit in EPA’s.

## Inflation Reduction Act Implementation

NGV America continues to submit comments and work to impact various implementation efforts associated with the passage of 2022’s Inflation Reduction Act to best position our members and the market. Previously we filed comments in response to an Internal Revenue Service (IRS) notice requesting input on tax changes adopted as part of the Inflation Reduction Act and relating to the alternative fuel infrastructure credit (IRC § 30C) and the new commercial clean vehicle credit (IRC § 45W). In 2023, we collaborated with other industry groups interested in the infrastructure tax credits. NGV America has asked that the IRS clarify that natural gas trucks employing hybrid systems qualify for the maximum available credit and seeks clarification on implementation of the fueling infrastructure credit to ensure a favorable interpretation of qualifying equipment.

In 2023, the IRS finally released proposed guidance related to the section 48 Investment Tax Credit and section 45V Hydrogen Production Credit. Both tax credits are critical to encouraging capital investments and the production of clean fuels and involve important issues related to renewable natural gas development. NGV America plans to submit comments on the IRS notices in early 2024.

# Advocate

## Renewable Fuel Standard

In June 2023, EPA released a final rule to establish biofuel volume requirements and associated percentage standards for cellulosic biofuel, biomass-based diesel (BBD), advanced biofuel, and total renewable fuel for 2023–2025. Notably EPA increased the cellulosic biofuel targets for 2023 to 840 million EGE up from the proposed level of 720 million EGE. The finalized cellulosic levels for 2024 and 2025 also include sizable increases 34 – 50 percent higher than the proposed levels. NGV America along with other industry partners advocated for the higher levels and is pleased to see EPA acknowledge the growth of RNG. EPA did not finalize changes related to recognition or inclusion of e-RINs. The e-RIN proposal proved to be quite controversial. Our concerns with the proposal go mostly to how the agency proposed calculating the credits. The final rules also include biogas regulatory reform provisions that also have garnered a significant level of concern. Biogas producers and the Coalition for Renewable Natural Gas have challenged the regulatory reform provisions in court.

## In State Capitols...

NGV America's State Government Advocacy Committee advanced multiple priorities in 2023 state legislative sessions, including protecting and extending existing and new NGV-positive incentives, expanding involvement in state Clean Fuel Standards, proposing RNG incentives & inclusion in existing vehicle and infrastructure incentive programs, protecting "low emission vehicle" (0.02 or lower NOx) inclusion in AFV incentives, promoting Life Cycle Fuel emissions focused vs. technology and tailpipe focused policy, and pursuing equitable fuel taxation and fee implementation. Specific successes include the continued waiver of CNG and LNG motor fuel taxes in Florida until 2026, Texas modified the TERP grant program to cover 80 percent of drayage truck purchase costs, and Indiana corrected a problem where natural gas motor fuel was not equitably taxed.



# Advocate

## Summary of Enacted State Legislation in 2023

NGV Incentives	RNG Incentives and Regulation	Hydrogen Incentives and Regulation
<p><b>CO</b> – updated Clean Fleet Enterprise grant program</p> <p><b>TX</b> – TERP changes including paying 80% of drayage vehicle</p> <p><b>WA</b> – includes CNG, LNG as feedstocks for jet fuel</p>	<p><b>CA</b> – reporting growth</p> <p><b>CO</b> – amends biomethane defs; updated grant/tax credit program</p> <p><b>IL</b> – Reimagining Energy and Vehicles in IL gives credits to renewable fuels</p> <p><b>MI, NJ</b> – funding, tax credits for renewable energy projects</p> <p><b>OH</b> – RNG qualifies for energy credits</p> <p><b>WA</b> – streamlining permitting; includes biomethane as feedstock for jet fuel</p>	<p><b>CA</b> – Budget Act includes H2 funding; reporting H2 growth</p> <p><b>CO</b> – updated Clean Fleet Enterprise grant program</p> <p><b>OK</b> – reinstated H2 fuel cell tax credits</p> <p><b>TX</b> – TERP changes including extensive H2 grants</p> <p><b>WA</b> – streamlining permitting; includes H2 as feedstock for jet fuel</p>
CNG/LNG/H2 Station Incentives	Incremental Sales Tax Exemption	CNG/LNG/H2 Fuel Excise Taxes
<p><b>CA</b> – Budget Act includes H2 funding</p> <p><b>TX</b> – TERP funding for H2 projects</p>	<p><b>FL</b> – sales tax exemption for equipment used to produce RNG</p>	<p><b>FL</b> – delays CNG and LNG motor fuels tax until 2026</p> <p><b>GA</b> – sets gallon equivalent for H2 at 2.2 pounds</p> <p><b>IN</b> – fixes overtaxation of CNG by adding a refund program; adds H2 to their IFTA</p> <p><b>MT</b> – taxes H2 per kg at gasoline rate</p> <p><b>SD</b> – added CNG, LNG to their IFTA</p>
ACT Rule, Omnibus Rule, ACF Rule, other Mandates	-Clean Fuel Standard (CFS) -Carbon Tax	Weight Limit Increase (Federal Reg – State Hwys by State)
<p><b>CA</b> – biomethane targets</p> <p><b>CO</b> – emissions reduction #s</p> <p><b>IL</b> – Gov. ZEV Act – Gov. vehicles to be EVs by 1/1/45</p> <p><b>NC</b> – prohibits the state from adopting vehicle sales or purchase requirements</p> <p><b>NV</b> – LD ZEV only for publicly owned vehicles by 2040, MHD by 2050</p> <p><b>NY</b> – state LD ZEVs by 2035, MHD by 2040</p> <p><b>OR</b> – state LD ZEV only purchase by 1/1/25</p>	<p><i>7 states proposed legislation</i></p>	<p><b>TN, TX</b> added EVs to weight limit increase</p> <p><b>OK, PA</b>–Added EVs &amp; H2 to weight limit increase</p>

# Advocate

## Clean Fuel Standards

- Existing programs – CA, OR, WA
- Support in 2023 – Introduced bills – IL, MA, MI, MN, NM, NY, VT
- Under discussion – CO, NJ, OH, PA
- New opportunities – NV, WI and others

## CARB and RNG

Environmental groups have focused on minimizing RNG's use in California. They specifically are calling for CA's LCFS to limit or eliminate RNG credits from animal waste, but it does not seem that CARB agrees with this approach at this time. CARB to consider additional LCFS modification proposals in 2024.

## Advanced Clean Truck (ACT), Omnibus, Advanced Clean Fleet (ACF) Rules

### ACT/Omnibus/ACF in California

- ACT – received U.S. EPA Waiver and is now active
- Omnibus – likely to receive waiver for latest revisions
- ACF – in late December, CA asked EPA for waiver and paused the ACF implementation for drayage trucks

### ACT/Omnibus/ACF in other states

- Approved ACT & Omnibus – CO, MA, NM, NY, NJ, OR, RI, VT WA
- Approved Omnibus – PA
- Considering ACT – MD, IL, NH, VA
- Considering ACF – NY and WA

### ACT/Omnibus/ACF Legislation to Repeal / Prevent

- NC – legislature enacted HB259 prohibiting these types of mandates after regulatory agencies began to act
- VA – HB1378 failed to repeal the ACT Rule. It has been introduced again for 2024
- CT – legislature postponed any regulatory action in 2023
- ME – legislature postponed any regulatory action in 2023
- NGVA is encouraging other states to initiate such legislation

# Advocate

## Indiana Taxation of Natural Gas Motor Fuel

After a multi-year advocacy effort, NGV America was successful in 2023 in securing passage of House Bill 23-1454, ensuring that state taxes on natural gas motor fuel are equitably levied and calculated based on the diesel gallon equivalent actually sold at the fueling dispenser.

NGV America worked with Rep. Randy Frye (HD-67), an NGV champion who gained the support of House Ways and Means Committee Chairman Rep. Jeff Thompson (HD-28) to help grow a coalition of like-minded legislators who ushered the change into law in this year's General Assembly session.

The discrepancy first arose in 2015 when the Indiana Department of Revenue changed the point of taxation for compressed natural gas sales from the CNG retail station dispenser to the natural gas utility meter to better align with how traditional liquid petroleum motor fuels are taxed. Taxes on gasoline and diesel motor fuel sales in Indiana are calculated at the rack (or from where the fuel is distributed) and not at the actual fueling station where the fuel is dispensed.

Furthering the problem was the fact that CNG motor fuel in Indiana was taxed energy-wise per gasoline gallon equivalent (GGE) but subject to the diesel gallon equivalent (DGE) rate, which added an additional 13 percent increase in CNG's effective tax rate. Before this legislative fix, total overtax rate for CNG motor fuel sold in Indiana was 18.77 percent, or approximately \$0.10 in additional tax over what diesel customers pay per gallon.



*Now retired Indiana Rep. Randy Frye (HD-67) is presented his 2023 NGV Public Policy Champion Award in November by Kris Kyler (KAKCO CNG Fuel) and Carl Schwabe (Midwest Clean Fuel).*



# Advocate



NGVA Director of Federal Affairs Matthew Brownlee (far left) and Clean Energy Fuels Vice President of Public Policy & Regulatory Affairs Todd Campbell (far right) host a policy briefing at NGV23 for representatives of four San Diego area Congressional offices.

## Political Leadership Council

NGVAmerica’s PLC – a group of industry executives dedicated to building the federal legislative and political reach of the natural gas vehicle industry – support efforts to engage Members of Congress, their staffs, and administration officials in advocating for immediate cost-effective and implementable net-carbon zero transportation solutions provided by natural gas vehicles.

In 2023, PLC members hosted a breakfast with Rep. Brian Fitzpatrick (PA-01), a member of the House Ways & Means Committee, Co-Chair of the bipartisan Problem Solvers Caucus, and co-sponsor of our \$1.00/gallon RNG Credit bill (H.R. 2448). During our April Fly-In, the PLC reception for Members of Congress included Representatives August Pfluger (TX-11), Greg Stanton (AZ-04), and Andrew Gabarino (NY-02). In September, the PLC hosted a virtual briefing with Daniel Silverberg and his colleagues from Capstone to give a policy outlook on RNG. The update included the regulatory timeline for the tax credits from the Inflation Reduction Act.

The growth of this group had a measurable impact in 2023; members included: Beyond6/Chevron, Chesapeake Utilities Corporation, Clean Energy Fuels, Cummins Clean Fuel Technologies, Freedom CNG, Hexagon Agility, Hyliion, Nicosia Contracting International, OPAL Fuels, Shell, Southern Company Gas, U.S. Energy, United Parcel Service, Westport Fuel Systems, and WM.

A promotional graphic for NGVAMERICA. At the top, it says "NGVAMERICA" in white on a teal background. Below that, in a circular frame, it says "PLEASE JOIN US FOR OUR BETTER THAN ZERO RENEWABLE NATURAL GAS CONGRESSIONAL STAFF HAPPY HOUR". The frame contains an image of a yellow semi-truck. Below the frame, it says "THURSDAY, JULY 20TH | 5:00 - 7:00 P.M. UPS TOWNHOUSE 421 NEW JERSEY AVENUE, SE". At the bottom, it says "R.S.V.P. TO ROCHELLE NEAL AT RNEAL@NGVAMERICA.ORG DROP INS WELCOME TOO!". At the very bottom, it says "OUR MEMBER HOSTS:" followed by the UPS and HYLIION logos.

# Advocate



Rep. August Pfluger (TX-11) of the House Energy & Commerce Committee with PLC members Andrew Okuyiga (UPS), Dan Gage (NGVA), Brittany Kelm (Shell), Mike Zimmerman (Cummins Clean Fuel Technologies), Eddie Murray (Freedom CNG) and Shawn Murphy (Shell).



Phoenix Rep. Greg Stanton (AZ-04) of the House Transportation & Infrastructure Committee shares his perspective at the PLC Reception.



NGVA's Sherrie Merrow presents at The Green Transportation Summit and Expo in Tacoma on August 24th.



# Promote & Educate

## Collateral

Click each image below to be redirected to respective pdf.

### Achieving Carbon Negative Transportation Today with RNG

**Ready-Right-Now**

- Road-tested, proven, commercially available, & scalable fleet technology
- Established refueling infrastructure of over 1,500 stations
- Mature network of manufacturers, servicers, & suppliers coast-to-coast
- Unmatched system resiliency & redundancy in times of storms & disasters

**The Cleanest Full-Fleet Heavy-Duty Truck Engine in the World is Powered by Natural Gas**

- 80% cleaner than EPA's current HDX emissions requirement
- 80% cleaner than the cleanest diesel engine
- Surpasses EPA's stricter Clean Trucks rule, effective Model Year 2027

**Heavy-Duty=Heavy Impact**

Replacing 1 traditional diesel burning heavy-duty truck with 1 new Ultra Low NOx natural gas heavy-duty truck is the emissions equivalent of removing 119 traditional combustion engine cars off our roads.

Source: <https://www.ngvamerica.com>

**1 truck for 119 cars**

**50** Renewable natural gas is produced in every U.S. state. 34 states produce geologic natural gas.

**4.1 million** natural gas industry jobs nationwide

**#1** America is the world's leader in natural gas production and technology

**CA LCFS Renewable Fuels Average CI**

**An American Fuel Sourced by American Labor using American Technology**

Investing in commercially available NGVs fueled by RNG is the most cost-effective and immediate climate positive change policymakers can affect. Learn more at [www.ngvamerica.org](https://www.ngvamerica.org).

### What is RNG?

**Renewable Natural Gas (RNG)**, or biogas, is gas produced from methane emitted through the decomposition of animal manure, food waste, forest management waste, wastewater sludge, and garbage.

RNG projects capture this methane and re-inject it into the environment, respawning it as a clean, renewable resource. Unlike other renewables, RNG is easily stored and transported. Once scrubbed of its impurities, it's injected into the existing global natural gas pipeline. While other sources of green and renewable energy require significant infrastructure buildout in order to be viable, RNG is affordably and easily used in existing vehicles today.

**In 2022, 69 percent of all natural gas used in the United States was from renewable sources.**

## The Renewable Natural Gas Incentive Act

Support H.R.2448

**\$1.00/gallon tax credit on the sale or use of RNG as a transportation fuel**

- RNG for fueling can cost two to three times more than conventional natural gas per MMbtu
- The dirtier the feedstock and lower CI RNG fuel is, the more production costs per gallon
- Comparable fuels receive \$1.00/gallon despite poor carbon intensity and emissions
- NG trucks save drivers and fleets money each year they are in use compared to diesel trucks, but they cost approx. \$65,000 more per vehicle
- This fuel credit helps to offset the cost of investing in new, clean vehicles and ensure the oldest, dirtiest diesel trucks are taken off of our roads

**NGVAMERICA**  
Natural Gas Vehicles for America

## Decarbonize Transportation with Renewable Natural Gas

Affordable and proven natural gas vehicle technology fueled with biomethane (RNG) collected at local landfills, wastewater treatment plants, commercial food waste facilities, and agricultural digesters can yield a carbon-negative lifecycle emissions result.

**2022 NGV Fuel Use**  
663 Million GGE Total  
In 2022, 69% of all on-road fuel used in natural gas vehicles was RNG.

- Conventional Natural Gas: 206 Million GGE
- Renewable Natural Gas: 457 Million GGE

**69%**

**RNG Production Facilities**

- 281 in operation
- 180 under construction
- 296 in development

**RNG use as a transportation fuel grew 17% over 2021 volumes, increasing 218% over the last five years. RNG offsets total of 5.63 million tons of CO2e in 2022.**

**Put into Perspective, Last Year RNG as a Transportation Fuel**

- Lowered GHG emissions equivalent to 13,962,408,760 miles driven by the average passenger car
- Reduced CO2 emissions equal to 632,947,174 gallons of gasoline consumed
- Sequestered carbon equal to growing 93,009,875 tree seedlings for ten years
- 6,656 jobs added to the U.S. for one year

**CA LCFS program data confirms that the annual average CI value of California's bio-CNG vehicle fuel portfolio for 2023 was carbon negative and below zero at -10.26 gCO2e/MJ.**

This 2022 on-road RNG use report was issued by NGVAMERICA and the Coalition for Renewable Natural Gas, April 2023. Find out more at [RNGCoalition.com](https://www.RNGCoalition.com) or [NGVAmerica.org](https://www.NGVAmerica.org).

**NGVAMERICA**  
Natural Gas Vehicles for America

## Decarbonizing California with Renewable Natural Gas Transportation

For the third consecutive year, California fleets fueled with renewable bio-CNG were carbon negative in 2022, based on an annual average carbon intensity score of -10.26 gCO2e/MJ. Biomethane sourced from dairy digesters, local landfills, wastewater treatment plants, commercial food waste facilities, and agricultural operations provides the most affordable and proven solution to decarbonize medium- and heavy-duty transportation today.

**Carbon free fueling now...**

**2022 CA NGV Fuel Use**  
197.45 Million DGE Total  
In 2022, 97% of all on-road fuel used in natural gas vehicles in California was RNG.

- Renewable Natural Gas: 190.46 Million DGE
- Conventional Natural Gas: 6.99 Million DGE

**97%**

**RNG use as a transportation fuel in California has increased 169% over the last five years. In 2022, alone, RNG use resulted in the displacement of 424 million metric tons of carbon dioxide equivalent (CO2e), equivalent to removing 86,796 gasoline-powered cars from California roadways for one year.**

**CA LCFS 2022 Renewable Fuels Average CI Score**

**Fuel Up on Fact:**  
At \$8.09, bio-CNG holds the lowest carbon intensity of any clean fuel option on California roadways today.

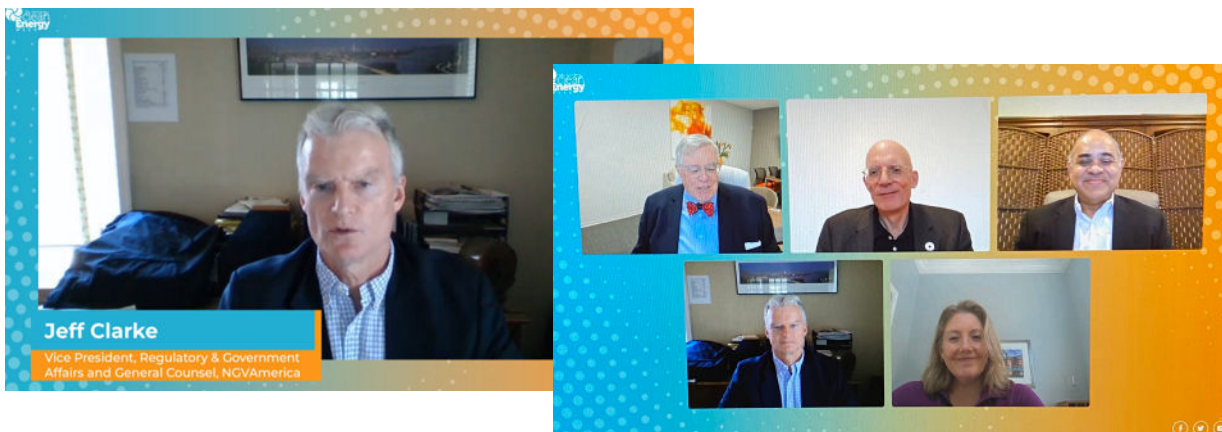
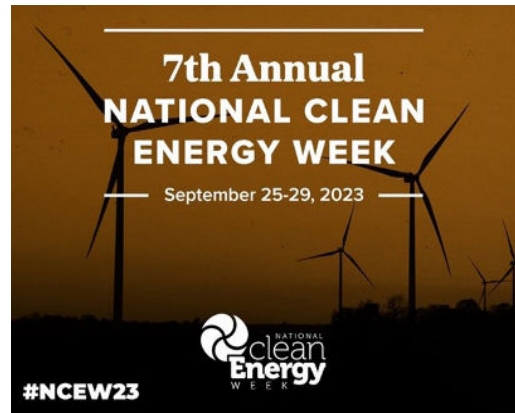
Report produced June 2023 by **NGVAMERICA** and **Coalition for Renewable Natural Gas**. Supporting Partners: **CALIFORNIA NATURAL GAS VEHICLE PARTNERSHIP** and **CALIFORNIA RENEWABLE TRANSPORTATION ALLIANCE**.



# Promote & Educate

## National Clean Energy Week

NGV America joined other forward leaning organizations and companies to serve as a sponsor of Citizens for Responsible Energy Solutions' (CRES) National Clean Energy Week in September. Director of Federal Affairs Matthew Brownlee attended multiple events and briefings around the capital city on behalf of the industry and Vice President Regulatory & Government Affairs Jeff Clarke participated on a virtual panel entitled, "Driving Forward Emissions Reduction in the Transportation Sector" alongside representatives from the Association of American Railroads, Honeywell, and ExxonMobil.



# Technology & Safety

## NGVA's Technology & Development Committee

NGVAmerica's Technology & Development Committee works with federal agencies and industry stakeholders on NGV technology development, codes and standards, best practices, and other industry safety issues to remove technical barriers for the advancement of natural gas use as a transportation fuel.

The Committee focuses on removing technical barriers to increase the adoption of clean burning natural gas vehicles and takes on emission analysis and publishes whitepapers that support the benefits of NGVs in various on-road, off-road, and non-road applications. Working groups have been established within the Committee to accomplish specific goals and priorities centered around three core focus areas: safety, sustainability, and industry advancement:

- **Emissions & Environmental** evaluates the environmental benefits of using natural gas as a transportation fuel and produces documents and materials for NGVAmerica members to review when discussing the benefits of using natural gas vehicles.
- **Incident Investigation & Root Cause Analysis** leads NGV incident investigations. This effort involves collaboration with the National Highway Traffic Safety Administration (NHTSA), industry representatives, and national laboratories. The main goal of this Work Group is to educate the industry on the root cause of the incident and ensure that proper codes and standards are in place to reduce the risk of occurrence in the future.
- **CNG Fuel System Inspection** works closely with government and private agencies to ensure inspection requirements and recommendations identified in regulatory and safety standard documents are adequate and fair to stakeholders in the NGV industry. Work products include modification to FMVSS 304 from a three-year or 36,000-mile inspection interval to every 12 months, development of a recommended practice for CNG fuel system inspection intervals with the American Trucking Association (ATA) Technology Maintenance Council (TMC), and a NGVA guidance document that details a four-tiered inspection process (i.e., pre-service visual inspection, cursory visual inspection, general visual inspection, and detailed visual inspection).
- **Maintenance Facilities** focuses on ensuring safe operation and servicing of natural gas vehicles in and around maintenance facilities and removing any inconsistent or burdensome requirements within and between relevant codes and standards. Primary focus is on code and standard development and collaborating with the associated development organizations to ensure that there is proper and consistent coverage for NGV maintenance facilities. The secondary focus is on providing industry guidelines and best practices and reviewing them regularly to ensure accuracy.
- **Codes & Standards** provides feedback to standard and code development organizations, while keeping the committee up to date on CNG and LNG standards being developed.
- **Gas Quality** works to ensure that the interests of the committee members are understood by organizations developing gas quality standards and hydrogen blending proposals for the natural gas pipeline distribution system.

# Technology & Safety

- **Research & Development** determines R&D priorities for the NGV industry and works with the Federal Government Advocacy Committee on yearly appropriations requests.
- **High Horsepower** focuses on opportunities for natural gas to fuel marine and rail applications as well as other industrial equipment with engines greater than 15 liters in displacement. Technological barriers that may exist in marine, rail, and mining applications are addressed, and opportunity is evaluated that can be applied from technical advances of on-road applications.
- **Virtual Pipeline** focuses on government advocacy, public communication/awareness, and codes/standards/safety to promote the distribution of natural gas beyond the conventional pipeline infrastructure. Current initiatives include development of formal documentation that highlights the safety, importance, and cost-effectiveness of CNG, LNG, and RNG delivery via regional and long-haul trucking.

## 2023 T&D Committee work products include:

- CNG cylinder pressure indication safety bulletin\*
- Hydrogen dispenser safety bulletin\*
- Updated Guide to Safe CNG Vehicle Conversions\*
- Updated CNG Vehicle Fuel System Inspection Guidance\*
- Successfully collaborated with multiple code/standard development organizations to update NGV industry codes, standards, and RPs
- Successfully advocated for modifications to cylinder inspection intervals in FMVSS 304 (2022)

\*Available on NGVAmerica's Resource Center at <https://ngvamerica.org/resource-center/>.



NGVA Director of Technology & Sustainability Paul Sandsted introduces the Preparing Your Team training, safety, and facility panel of experts from AFVi, Clean Energy Fuels, and WM at NGV23.



# Convene

## DC Fly-In and Lobby Days

NGV America's in-person Spring Fly-In Advocacy Days were held Tuesday and Wednesday, April 18th and 19th. Over 40 participants convened with and heard from Members of Congress, their staffs, and officials from the U.S. Departments of Energy, Transportation, and Agriculture across 30-plus meetings over two days. The Political Leadership Council met with senior DOT officials and House leadership including Majority Whip Tom Emmer and Democratic Whip Katherine Clark and hosted a Tuesday evening reception attended by several Members of Congress who addressed the group. The advocacy program was capped by a networking and legislative staff reception Wednesday evening sponsored by Hyliion.



PLC members Andrew Okuyiga (UPS), Mike Zimmerman (Cummins Clean Fuel Technologies), Eddie Murray (Freedom CNG) and Mitchell Pratt (Clean Energy Fuels) join NGVA consultant Chris McCannell (GrayRobinson) in preparing to brief U.S. DOT leadership.



Members meet with staff of Rep. Michelle Fischbach (MN-07) of the House Ways & Means Committee.



Representative Debbie Lesko (AZ-08) of the House Energy & Commerce Committee poses with members after meeting.

# Convene



*Ibn Salaam (WM), Mike Zimmerman (Cummins Clean Fuel Technologies), Mitchell Pratt (Clean Energy Fuels), Scott Lane (Pace LLP for Clean Energy Fuels), Eddie Murray (Freedom CNG) and James Littlefair (Clean Energy Fuels) join Alaska's senior Senator Lisa Murkowski of the Senate Appropriations and Energy & Natural Resources Committees outside the U.S. Capitol.*



*Rep. Young Kim (CA-40) of the Problem Solvers Caucus welcomes 2023 NGVA Chair Mitchell Pratt (Clean Energy Fuels) to her Capitol Hill office.*



*2023 NGVA Chair Mitchell Pratt (Clean Energy), NGVA Board members Brett Brown (Dominion Energy), Manuel Alarcon (SoCal Gas), and Eric Bevevino (Valvoline) join Matt Loser (Valley Civil Design Group), and NGVA's Dan Gage to pose with Rep. Blake Moore (UT-01) of the House Ways & Means and Budget Committees.*



*AGA's Frank Canavan and NGVAMerica's Sherrie Merrow and Jeff Clarke provide a clean fuel standard and state policy update to Fly-In participants.*



# Convene

## ACT Expo Reception

After a successful day of sessions and on the ACT Expo floor, NGV America members gathered for their annual networking reception at Golden Road Brewing in Anaheim on May 2nd. Here NGVA's Dan Gage and Sherrie Merrow prepare to greet attendees.



Join us in celebrating the upcoming Golden Age of Natural Gas Transport

## NGVAMERICA'S ANNUAL MEMBER NETWORKING RECEPTION

at the **ACT EXPO**

**Tuesday, May 2nd**  
5:30-7:30 p.m. pacific

**GOLDEN ROAD BREWING**  
Golden Road Brewing, Anaheim  
2010 East Orangewood Avenue

**NGVAMERICA**  
Please email Rochelle Neal at [rneal@ngvamerica.org](mailto:rneal@ngvamerica.org) with any questions

**RSVP HERE**  
or scan this code:

# Convene



## NGV23 – 2023 Annual Meeting & Industry Summit

NGV America hosted a successful 2023 Annual Meeting and Industry Summit at the Rancho Bernardo Inn in San Diego, CA from October 23rd through 25th.

With a fleet-focused agenda this year, attendees learned how RNG-fueled vehicles are an affordable and practical solution to lower fuel costs and reduce emissions impact, how to order and accurately spec vehicles based on application and need, fueling options, the importance of team training, service and maintenance schedules, safety considerations and best practices as well as insights from fleets already converting to renewable natural gas. The newest natural gas vehicle technology –

including a Peterbilt 579 equipped with the new Cummins 15L X15N™ engine, American Power Group's Freightliner CC 132 Coronado equipped with a Detroit Diesel DD15 – 505 HP and the Cow Fart Bus powered by the DEMI diesel displacer and NeuFuel technology – were on display and available for ride alongs.

Attendees convened through numerous networking opportunities made possible through the generous support of Presenting Hosts Chevron/Beyond6 and Clean Energy Fuels... Platinum Sponsors OPAL Fuels, California Renewable Transportation Alliance, Cummins Clean Fuel Technologies, and WM... Gold Sponsor Hexagon... and Silver Sponsor Shell.





# Convene



2023 Chair Mitchell Pratt and President Dan Gage present a State of the Industry update to kick off the NGV23 program.



Mark and Sherri Matheson with fleet member Matheson, Inc.



# Convene



Puneet Jhawar presents on Cummins' new 15 liter natural gas engine offering.



OPAL Fuels Co-CEO Adam Comora.





# Convene



*Clean Energy Fuels' Todd Campbell and Cummins' Tom Swenson detail the California Natural Gas Vehicle Partnership's merger with the California Renewable Transportation Alliance.*



*AFVi's Annalloyd Thomason makes a point during a panel conversation.*





# Convene



Attendees check out the new Cummins X15N engine.





# Convene



Jared Rifembary, Allehah VanLoan, and Brent Tesla of Chevron/Beyond 6 hit the links.



Chesapeake Utilities' Mike Salassa accepts his team's awards from Chevron's Nuray Elci, sponsor of our golf outing.



# Convene



Winners of the second annual PLC Cornhole Tournament at NGV23 in San Diego.





# Convene

## NGV Leaders Recognized at NGV23

Ten organizations and individuals were honored at NGV America's 2023 Industry Summit and Annual Meeting in San Diego for their contributions toward the advancement of natural gas as a transportation fuel.



### The 2023 NGV Achievement Award Recipients are:

ACE Recycling & Disposal  
Detmar Logistics  
Wegmans Food Markets

Natural Gas Fleet Program  
Natural Gas Fleet Program  
Natural Gas Fleet Program

City of Long Beach, CA  
Los Angeles County Sanitation Districts

Natural Gas Public Fleet Program  
Natural Gas Public Fleet Program

Mitchell Pratt  
John Jordan  
Nuray Elci

Lifetime Achievement Award  
Lifetime Achievement Award  
NGV Horizon Award

State Rep. Randy Frye (IN)  
Texas Commission on Environmental Quality

NGV Public Policy Champion  
NGV Public Policy Champion



# Convene



Nuray Elci and the Chevron/Beyond 6 team with 2023 Chair Mitchell Pratt and President Dan Gage.



John Jordan accepts his Lifetime Achievement Award surrounded by his Hexagon Agility colleagues, incoming Chair Marty Tufte, 2023 Chair Mitchell Pratt, and President Dan Gage.



Outgoing Chair and longtime Board Member Mitchell Pratt poses with his Lifetime Achievement Award alongside his Clean Energy Fuels colleagues Ryan Kenny, Chad Lindholm, Todd Campbell, and James Littlefair.



# NGV America Leadership

## Management Team

**Daniel Gage**  
President

**Jeffrey Clarke**  
Vice President  
Regulatory &  
Government Affairs and  
General Counsel

**Matthew Brownlee**  
Director, Federal  
Government Affairs

**Sherrie Merrow**  
Director, State  
Government Affairs

**Rochelle Neal**  
Manager, Finance,  
Operations &  
Member Solutions

**Paul Sandsted**  
Director, Technology  
& Sustainability



*NGV America Team Members Paul Sandsted, Jeff Clarke, Sherrie Merrow, Dan Gage, Rochelle Neal, and Matthew Brownlee at NGV23*

## Officers & Executive Committee

**Marty Tufte**  
Chair  
WM  
Corporate Fleet Director

**Puneet Jhavar**  
Vice Chair  
Cummins Inc.  
General Manager,  
Global Spark Ignited  
and Fuel Delivery  
System Business

**Mike Zimmerman**  
Treasurer  
Cummins Clean Fuel  
Technologies  
General Manager

**Jeffrey Clarke**  
Secretary  
NGV America  
Vice President  
Regulatory &  
Government Affairs  
and General Counsel

**Mitchell Pratt**  
Immediate Past Chair  
Clean Energy Fuels  
Chief Technology  
Development Officer  
Rimere  
Chief Executive Officer

**Jim Arthurs**  
JD Arthurs & Associates  
President

**Daniel Gage**  
NGV America  
President

**Charlie Ker**  
Westport Fuel Systems  
Senior Director, Business  
Development North  
America

**Ashley Remillard**  
Hexagon Group  
Senior Vice President  
Legal and Government  
Affairs

**Jennifer Stokes**  
CenterPoint Energy  
Key Account Manager



*NGVA Officers/Executive Committee members Jeff Clark, Mike Zimmerman, Puneet Jhavar, Marty Tufte, Mitchell Pratt, Jennifer Stokes, Charlie Ker, Jim Arthurs, Ashley Remillard, and Dan Gage at NGV23*



# NGV America Leadership

## Board of Directors

**Manuel Alarcon**  
SoCalGas  
Customer Energy  
Solutions Manager

**Eric Bevevino**  
Valvoline, Inc.  
Senior Director,  
Channel Partner &  
Heavy-Duty Sales

**Caitlin Bollwinkel**  
American CNG/DEMI  
Administrative Director

**Brett Brown**  
Dominion Energy  
Manager, Operations

**Adam Comora**  
OPAL Fuels  
Co-CEO

**Thomas Condon**  
New Jersey Natural Gas  
Natural Gas Vehicle  
Program Director

**Todd Gordon**  
South Jersey Gas  
Company Director of  
Business Development

**Karen Harbert**  
American Gas  
Association  
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**Jared Hightower**  
ANGI Energy Systems  
Vice President of Sales

**Lynn Lyon**  
U.S. Energy  
Director of Business  
Development  
– Sustainable  
Transportation

**Shawn Murphy**  
Shell  
Global Engineering  
Manager – LNG/RNG/  
Regas

**David Nestor**  
Piedmont Natural Gas  
Director, CNG

**Natalia Norko**  
WGL  
Director Commercial  
Partnerships, Strategy &  
Innovation Utilities

**Tony Orr**  
PepsiCo  
Senior Manager,  
Fleet Engineering &  
Sustainability

**Monte Patrick**  
TECO Peoples Gas  
Director

**Annie Policastro**  
United Parcel Service  
Vice President,  
Government Relations

**Marc Rowe**  
Trillium  
General Manager,  
Fuel Sales

**Michael Salassa**  
Chesapeake Utilities  
Corporation  
Business Development  
Manager

**Russell Schindler**  
Ingevity Corporation  
Strategic Sales Manager  
– NeuFuel

**Ian Skelton**  
Southern Company Gas  
Director – Natural Gas  
Vehicles

**Jeff Snyder**  
Chevron/Beyond6  
Renewable Fuels  
Manager

**Dean Stapleton**  
Penske Truck Leasing,  
L.P.  
Senior Manager,  
Alternative Fuels

**Carl Suhr**  
Kwik Trip, Inc.  
Transportation  
Compliance Manager

**Joe Varela**  
Southwest Gas  
Director, Emerging  
Technology & Innovation  
Manager



*NGV America offices are located at 400 North Capitol Street, NW, Suite 450, steps from the U.S. Capitol and the Senate Fountain.*

