

— 2022 —

Annual Report



President's Message



NGV America Members and Colleagues:

I am proud to present this 2022 Annual Report. Now entering our thirty-fifth year, NGV America remains the national leader in the development of a growing, profitable, and sustainable marketplace for vehicles, ships and carriers powered by natural gas and biomethane.

Our roughly 200 member companies are sustainability solutionists that 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 2022 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 Jim Arthurs for concluding three successful years at the helm as NGV America Chair (2020-2022). Welcome to recently elected Chair Seung Baik. Our association and industry remain in steady leadership hands.

With your continued support and involvement, there's so much more we can accomplish in 2023.

Daniel Gage
NGV America
President

Chair's Message



Dear Industry Colleagues,

NGV America's 2022 legislative successes were highlighted by the multi-year extension of the \$0.50/gallon Alternative Fuel Tax Credit, the introduction of bipartisan and bicameral legislation to create a similar new \$1.00/gallon RNG credit, and the expansion of Clean Fuels Standard program conversations in state capitols across the nation.

This coming year NGV America will educate the new 118th Congress on the benefits of a multi-technology approach to cleaner air quality and climate change, and we will continue to communicate to states expressed support for efforts to decarbonize medium- and heavy-duty trucking and reduce criteria emissions with commercially available, affordable, and proven natural gas technologies.

Our Technology and Development Committee with its multiple working groups will further industry safety, training, codes and standards, and sustainability advancements in preparation for new engine offerings readying for North American deployment.

NGV America will lead again in 2023. We can achieve clean air everywhere. Join us!

A handwritten signature in black ink, appearing to read 'Seung Baik'.

Seung Baik
Hexagon Agility
Chair

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AFTC Extension Secured Through 2024

A three-year extension of the Alternative Fuels Tax Credit (AFTC) was secured in the Inflation Reduction Act (IRA) of 2022 approved in August. This action extends the \$0.50/gallon AFTC through December 31, 2024.

In addition to the three-year AFTC extension, the IRA package advances additional tax items important to the heavy-duty clean technology vehicle and RNG production industries:

- Clean Fuel Production Tax Credit \$45Z
- Production Tax Credit \$45
- Investment Tax Credit \$48
- Alternative Fuel Refueling Tax Credit \$30C
- Qualified Commercial Clean Vehicle \$45

RNG Tax Credit Gains Momentum

Efforts to create a new \$1.00/gallon motor fuel tax credit for renewable natural gas (RNG) reached new heights in 2022.

Senators Richard Burr (R-NC) and Mark Warner (D-VA) introduced the Renewable Natural Gas Incentive Act ([S. 4568](#)) in the U.S. Senate in July, and Representatives Linda T. Sánchez (D-CA) and Brian Fitzpatrick (R-PA) introduced a same-as bill ([H.R. 9396](#)) in the U.S. House in December.

NGVamerica will reintroduce the measure in the 118th Congress.



Hyllion's Bobby Cherian, UPS's Mike Whitlatch, WM's Mike Jensen, U.S. Gain's Lynn Lyons and NGVamerica's Dan Gage presented at NGVamerica's Capitol Hill Staff Briefing in July.



FY 2023 Omnibus Package

The FY 2023 Omnibus spending package passed in the waning hours of the 117th Congress included two specific NGVamerica asks related to natural gas transportation. \$10 million for natural gas vehicle research was included in U.S. Department of Energy funding as well as \$2.5 million for emission reduction and alternative fuel locomotives in Federal Railroad Administration funding.

Clean Energy Fuels' Andrew Littlefair presents the NGVamerica Public Policy Champion Award to Senator Richard Burr (R-NC) during a Capitol Hill visit in May.



Hear directly from fleets!

Strengthening Supply Chains & Decarbonizing Heavy-Duty Transport

Congressional Staff Briefing
Thursday, July 21, 2022
2:00 – 3:30 p.m.

House T&I Committee Hearing Room
2167 Rayburn HOB

Hear how RNG-fueled freighting is:

- Strengthening our supply chain
- Lowering trucking costs
- Providing consumer relief
- Decarbonizing heavy-duty transportation
- Repurposing waste into a clean energy asset

For more information, contact Matthew Brownlee, NGVAMERICA's Director, Federal Affairs at mbrownlee@ngvamerica.org



Come have an ice cream on us!

Alternative Fuel Corridor Designations

The Bipartisan Infrastructure Law enacted in 2021 for the first time provided funding for alternative fuel infrastructure. The Federal Highway Administration (FHWA) is developing guidance and rules for the new funding initiatives, and on July 5th FHWA made new designations that include nine CNG, nine LNG, corridor-pending corridors; along with the designation of three CNG corridor-ready highways.

FHWA Guidance for Charging and Fueling Infrastructure

NGVAMERICA filed comments with the Federal Highway Administration in January addressing the importance of supporting infrastructure for all alternative fuels; ensuring that new investments support existing investments and retail establishments; the emission benefits of renewable natural gas; and the need to prioritize investments in medium- and heavy-duty fueling as a way to address emissions in urban areas and areas disproportionately impacted by harmful truck emissions.

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. EPA issued guidance and information in May for the first \$500 million round of funding.

NGVAmerica successfully advocated for natural gas inclusion in the program as well as publicized subsequent funding opportunities throughout the year.

FTA Low-No Program Grants

For the first time ever, the Federal Transit Administration awarded coveted Low/No transit bus funding to natural gas technologies as part of its announced FY 2022 grants to help modernize bus fleets and bus facilities across the country. The funding is specific to the purchase or lease of low- or no-emission vehicles that use advanced technologies to help improve air quality and combat climate change. This year's funding for natural gas is the result of a successful multi-year effort by NGVAmerica 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."



NGVAmerica's Dan Gage with U.S. DOE's Michael Laughlin, WRI's Sue Gander, U.S. EPA's Esperanza Perez, and PERC's Stephen Whaley at the School Transportation News Expo and Summit in Reno, NV.



NGVAmerica's Dan Gage and U.S. DOE's Michael Laughlin (center) with the DEMI's Sam Johnson (far left) and Nate Thacker (far right) and NeuFuel's Erik Versen (second from right) at the School Transportation News Expo and Summit in Reno, NV.



NGVAmerica's Jeff Clarke and Matthew Brownlee share the NGV22 stage with GrayRobinson's Chris McCannell (NGVAmerica consultant) and UPS's Annie Lawrence (Chair of NGVAmerica's Federal Government Advocacy Committee)

EPA Clean Truck Rule

On December 20th, the U.S. Environmental Protection Agency finalized new, stronger standards for nitrogen oxides (NOx) and other pollutants from heavy-duty trucks. This rule, “Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards,” takes final action on EPA’s March 28, 2022, proposal. Unlike existing diesel engine systems, current natural gas engine technologies comfortably meet this new, stricter NOx standard of 0.035 grams per horsepower hour or 35 g/hp-hr (required by Model Year 2027).

Inflation Reduction Act Implementation

NGVAmerica continues to submit comments and work to impact various implementation efforts associated with the passage of 2022’s Inflation Reduction Act to best position its members and the market. Most recently, comments were filed 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). NGVAmerica asks 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.

EPA Renewable Fuel Standard

The Renewable Fuel Standard (RFS) is a federal program that requires transportation fuel sold in the United States to contain a minimum volume of renewable fuels. The U.S. Environmental Protection Agency (EPA) administers the RFS with annual volume requirements for several categories of renewable fuels. The program has been hugely important to encouraging the use of renewable natural gas (RNG) as a transportation fuel and improving the economics of fleets deploying natural gas vehicles.

For proposed RVO Levels 2020-2022, NGVAmerica signed on to group comments with industry partners urging EPA to provide certainty and establish aggressive targets for cellulosic biofuels like RNG. EPA’s final rule issued in June 2022 provides the following renewable volume obligations (RVOs) for cellulosic biofuel: 510 million ethanol gallon equivalents (EGE) for 2020, 560 million EGE for 2021, and 630 million EGE for 2022.

EPA also proposed new RVO levels for 2023 and later years. That proposal - referred to as the “set” rule - was issued in December 2022. Working with members and industry partners, beginning in early 2023 NGVAmerica will submit response comments to EPA and continue its RFS advocacy, calling for policies and set levels that support multi-technology approaches to transportation decarbonization, prioritize natural gas vehicle value parity, and allow for the expanded RNG production capacity needed to meet projected increased natural gas vehicle demand.

In State Capitols...

NGVAmerica’s State Government Advocacy Committee advanced multiple priorities in 2022 state legislative sessions, including protecting, extending, and creating NGV incentives (including new ideas for scrappage and incentivizing pre-owned NGVs), supporting the creation of new clean fuel standard programs (key opportunities in NY, NM, MN and other states) enhancing pro-NGV taxation policies, and advancing net-zero through RNG messaging through scoping plans, ACT Rules and other regional activities.

Advocate

State Regulatory Efforts

NGVAmerica advocated for NGVs in multiple proposed rulemakings in states across the country in 2022. Highlighted efforts include the California's CARB Scoping Plan, LCFS program evaluation, Advanced Clean Truck and Advanced Clean Fleet Rules, Washington State's Clean Fuels Program Draft Rule, New York's Scoping Plan and Clean Fuel Standard debate, Colorado's Clean Truck Strategy. Communications were sent to multiple states that have indicated interest in adopting stricter medium- and heavy-duty clean truck rules based on the California scheme.

Our message included expressed support for the objectives of such actions, i.e., decarbonizing the medium- and heavy-duty trucks and reducing criteria emissions, but cautions against relying on a sales mandate to achieve these objectives given that in most cases medium- and heavy-duty zero tailpipe emission vehicles are not commercially available, affordable, or proven. States should instead encourage the sale of a variety of commercially available technologies like natural gas trucks. States also should provide credits for existing near-zero natural gas trucks powered by renewable natural gas and allow these credits to count toward the ZEV sales mandates.

Volkswagen Settlement Funding

NGVAmerica continues to comment on and monitor state clean truck and bus funding award flights related to the Volkswagen emissions settlement. Links to State Mitigation Plans and funding notices remain available on our regularly updated VW Trust Action Center online.

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 - successfully completed its first full year in 2022. PLC members 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.

The growth of this group had a measureable impact in 2022 on legislative efforts, including the three-year extension of the AFTC and the bipartisan introduction of the accompanying RNG tax credit.

2022 PLC members included: Beyond6, Chesapeake Utilities Corporation, Clean Energy Fuels, Cummins Clean Fuel Technologies, Freedom CNG, Hexagon Agility, Hylion, Nicosia Contracting International, OPAL Fuels, Shell, Southern Company Gas, Southwest Gas Corporation, U.S. Gain, United Parcel Service, Westport Fuel Systems, and WM.



Winners of the PLC Cornhole Tournament at NGV22 in Charleston, SC.

Promote & Educate

Fleet Academy

NGV America conducted its first ever Fleet Academy in May and June, a live, virtual event series consisting of four 90-minute sessions with presentations by faculty comprised of member company topic experts.

Fleet participants learned how RNG-fueled vehicles are an affordable and practical solution to lower fuel costs and reduce emissions impact, how to 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 natural gas.

All four 90-minute sessions can be shared and viewed on demand on our **Start Now; RNG is How** page online. This inaugural program was supported by generous sponsorships from Clean Energy Fuels, Shell, NGVi, New Jersey Natural Gas, and U.S. Gain.



Session I Session II Session III Session IV

HYPERTRUCK ERX OVERVIEW

Hypertruck ERX system is under development, w/ customer roadshow demonstration events in progress

- OPERATING COST** $\text{ERX} < \text{DIESEL}$
- RANGE** 1,000+ Miles Hybrid miles $\text{All electric miles}$ ~ 75
- PAYLOAD** EV EVSE
- DRIVER EXPERIENCE** 670 Horsepower
- INFRASTRUCTURE** 700+

HYLIION

Session I Session II Session III Session IV

Types of CNG Fuel System Inspections

Inspection Type	When Performed?	Inspection Level	What is Inspected?	Who Performs?
Pre-Service Inspection	Prior to placing vehicle in service	Detailed Visual Inspection	Thorough inspection of all high-pressure	A certified or qualified CNG Fuel System
Driver Pre- and Post-Trip Inspection	Before and after each trip in a CNG vehicle	General Visual Inspection		
Detailed Visual Inspection	During any preventive maintenance/service			
	After any accident or fire AND at least every 12 months (GVWR > 10,000 lbs.) OR at least every 3 years/36,000 miles (GVWR < 10,000 lbs.)			

NGVI

Session I Session II Session III Session IV

Time-fill CNG Fueling

A cost effective fueling option that

Session I Session II Session III Session IV

Why NGVs?

Sustainable, Cost Effective, Available & Domestic

- Reduce emissions**
- Go carbon-negative now**
- Clean air compliant**
- Lower fuel costs**
- Affordable and scalable vehicle options**
- Available for every application**
- Established fuelers, suppliers, and servicers**
- Domestically-sourced**
- Conflict-free**

NGV AMERICA

Promote & Educate

Start Now - RNG is How

In conjunction with the Fleet Academy, NGV America released its **Start Now; RNG is How** report and webpage, a free guide to assist fleets on how best to reduce costs and achieve cleaner air and decarbonized miles today with an RNG-fueled fleet.

Available online at <https://ngvamerica.org/rng-is-how>. Start Now inaugural sponsors include Clean Energy Fuels, New Jersey Natural Gas, NGVi, and Shell.



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 operations can yield a carbon-negative transportation solution.

2021 NGV Fuel Use
616 Million GGE Total
In 2021, 64% of all commercial fuel used in natural gas vehicles was RNG.

RNG Growth
2017: 100,000,000 GGE
2018: 150,000,000 GGE
2019: 200,000,000 GGE
2020: 250,000,000 GGE
2021: 300,000,000 GGE

RNG Production Facilities
250 landfills, 112 wastewater treatment plants, 125 commercial food waste facilities, 125 agricultural operations.

RNG Use as a Transportation Fuel
RNG use as a transportation fuel grew 13% over 2020 volumes, increasing 334% over the last 10 years. RNG offset a total of 3.8 million tons of CO₂e in 2021.

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

Landed RNG (equivalent to 100% at \$1.45/gallon)	4,426,002,333	Reduced CO ₂ e (equivalent to 100% at 1.00/ton)	427,301,638	Equivalent carbon credit (equivalent to 100% at \$1.00/ton)	82,790,833	Life-cycle CO ₂ e (equivalent to 100% at \$1.00/ton)	4,404,013
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CAH3 LCFS program data estimates that our annual average 11.1 million of California low-CNG vehicles used available for 2021 will purchase approximately 1.6 million of low-CNG (20% RNG) at an average of \$1.45/gallon.

RENEWABLE NATURAL GAS
This 2021 on-road RNG use report was issued by NGV America and the California Air Resources Board in May 2022. For full details visit rngcc.cafiles.com or ngvamerica.org.

NGV AMERICA
Natural Gas Vehicles for America

Decarbonizing California with Renewable Natural Gas Transportation

RNG Growth in California in Diesel Gallon Equivalents (DGE)

Carbon free fueling now... 98%

2021 CA NGV Fuel Use
17.83 Million DGE Total
In 2021, 98% of on-road fuel used in California was RNG.

2021 RNG use as a transportation fuel in California has increased 183% over the last five years. In 2021 alone, RNG use resulted in the displacement of 2.9 million tons of carbon dioxide (CO₂e) equivalent (equivalent to removing 600,000 passenger cars from California's roads for one year).

CA LCFS 2021 Renewable Fuels Average CI Score

Fuel Up on FACT	100
Renewable Diesel	85
Renewable Natural Gas	85
Renewable Diesel	85
Renewable Diesel	85

Report produced October 2022 by **RENEWABLE NATURAL GAS** and **NGV AMERICA**. Supporting Partners: CALIFORNIA NATURAL GAS PARTNERSHIP, California Natural Gas Vehicle Coalition.

Key Impacts on Natural Gas Fueling and Vehicles

Inflation Reduction Act of 2022 • PL 117-169

Production Tax Credit (PTC) 845
• 30% bonus credit for energy community production and includes variety of sources (e.g., geothermal, biomass, landfill, landfill gas, etc.)
• 10% bonus credit for energy community production and includes variety of sources (e.g., geothermal, biomass, landfill, landfill gas, etc.)
• 10% bonus credit for energy community production and includes variety of sources (e.g., geothermal, biomass, landfill, landfill gas, etc.)

Alternative Fuel Tax Credit (AFTC) 842
• 50¢ per gallon credit for use in motor vehicles or equipment
• 50¢ per gallon credit for use in motor vehicles or equipment
• 50¢ per gallon credit for use in motor vehicles or equipment

Clean Fuel Production Tax Credit (CFPTC) 842E
• 50¢ per gallon credit for use in motor vehicles or equipment
• 50¢ per gallon credit for use in motor vehicles or equipment
• 50¢ per gallon credit for use in motor vehicles or equipment

Additional Clean Fuel & Energy Production Tax Credits

Clean Fuel Production Tax Credit (CFPTC) 842E
• 50¢ per gallon credit for use in motor vehicles or equipment
• 50¢ per gallon credit for use in motor vehicles or equipment
• 50¢ per gallon credit for use in motor vehicles or equipment

Alternative Fuel Refueling Tax Credit (AFTC) 842
• 50¢ per gallon credit for use in motor vehicles or equipment
• 50¢ per gallon credit for use in motor vehicles or equipment
• 50¢ per gallon credit for use in motor vehicles or equipment

Learn more at ngvamerica.org.

NGV AMERICA
Natural Gas Vehicles for America

Webinars

NGV America hosted a series of webinars and webcasts in 2022. The first - presented with support from Hexagon Agility in March - detailed RNG's decarbonization strategy for medium- and heavy-duty fleets.



Start Now - RNG is How

RNG: a viable decarbonization strategy for medium- and heavy-duty trucks

SAVE THE DATE

Live Webcast
Wednesday, March 2 at 9 AM PST

with **HEXAGON AGILITY**

NGV AMERICA
Natural Gas Vehicles for America

NGV America's Dan Gage with Hexagon Agility's Karen Romer, Eric Bippus, and Ashley Remillard

Technology & Safety

NGVAmerica'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 advance natural gas use as a transportation fuel.

The Committee focuses on removing technical barriers to increase the adoption of clean burning natural gas vehicles by taking on emission analysis and publishing 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 three tiered inspection process – 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.
- **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.

Technology & Safety

2022 T&D Committee Work Products and Development Participation include*:

- Mainstay module safety notice
- NGV incident investigation checklists/questionnaires for CNG and LNG
- Well gas safety bulletin
- Condensed version of best practices for time-fill fire safety
- TMC RP 518B - Fuel Station Planning
- TMC RP378 - CNG post-collision-and-thermal-events
- TMC RP 1117 - Guidelines for Shop Sustainability Efforts
- Updated CNG Vehicle Fuel System Inspection Guidance
- Updated guide to safe CNG conversions
- Reissued cold weather bulletin
- Updated Listing of NGV Codes and Standards

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

Of particular interest to NGVAmerica member companies, the Committee is working to better connect and integrate renewable natural gas production with NGV technologies and infrastructure. The introduction of hydrogen into gas distribution systems, the build out of heavy-duty hydrogen fueling infrastructure, and the development of new hydrogen commercial vehicle technology – including hydrogen ICEs – also gained increased Committee attention in 2022.



NGVAmerica's Paul Sandsted with Heil's Nitesh Shroff and Tony Giles at a Technology & Development Committee meeting at NGV22

Convene

DC Fly-In and Lobby Days

NGVAmerica's in-person Spring Fly-In Advocacy Days were held April 5th and 6th. Participants convened with and heard from Members of Congress, their staffs, and officials from the U.S. Departments of Energy and Transportation and the Environmental Protection Agency. The two-day advocacy program was capped by a networking and legislative staff reception sponsored by Hyliion.

Participating Members of Congress included **Reps. Stephanie Bice (R-OK), Salud Carbajal (D-CA), Kevin Hern (R-OK), Carol Miller (R-WV), Darin LaHood (R-IL), Adrian Smith (R-NE), Jason Smith (R-MO), and Lou Correa (D-CA).**

NGV22 – 2022 Annual Meeting & Industry Summit

NGVAmerica hosted a successful Annual Meeting and Industry Summit at the Wild Dunes Resort outside Charleston, SC from November 1st through 3rd. Attendees heard from South Carolina Attorney General Alan Wilson, WM Chief Operating Officer John Morris, Clean Energy Fuels President and CEO Andrew Littlefair, Cummins Inc.'s General Manager of Global Spark Ignited Business Puneet Jhawar, Velocity Vehicle Group Director of Low Carbon Vehicles Bob Carrick, and Colorado State Senator Chris Hansen.

Representatives from American Gas Association, American Public Gas Association, American Truck Dealers, American Trucking Associations, California Natural Gas Vehicle Coalition, California Natural Gas Vehicle Partnership, National Association of Truck Stop Operators, North American Council for Freight Efficiency, SEA-LNG, Texas Natural Gas Vehicle Alliance, and the U.S. Department of Energy – Vehicle Technologies Office participated in roundtable presentations.

Attendees enjoyed the resort's ample amenities and convened through numerous networking opportunities made possible through the generous support of Presenting Sponsor Clean Energy Fuels and Platinum Sponsors Chevron, Beyond6, DEMI, and NeuFuel.



Rep. Salud Carbajal of California (center) with Hexagon Agility's Seung Baik (left) and NGVAmerica Chair Jim Arthurs (right)



NGVAmerica's Jim Arthurs and Allison Cunningham with U.S. House Ways & Means Committee Chair Jason Smith (R-MO)



NGVAmerica's Jim Arthurs and Jeff Clarke with U.S. EPA's Sarah Dunham, Director, Office of Air and Radiation



South Carolina Attorney General Alan Wilson with Cummins' Puneet Jhawar, NGVAmerica Chair Jim Arthurs, and NGVAmerica President Dan Gage

Convene



WM Chief Operating Officer John Morris shares details on WM's vehicle fleet, the largest Class 8 natural gas fleet in North America, with NGV22 attendees. The company is investing an additional \$850 million in RNG production and will have 100% of its fleet running on RNG by 2025.



Convene



Puneet Jhavar, General Manager - Global Spark Ignited business for Cummins Inc., shares how natural gas plays a foundational role in Cummins' Destination Zero strategy. Jhavar detailed the upcoming production and delivery timeline for its new 15 liter natural gas engine.



Convene



Clean Energy Fuels President and CEO Andrew Littlefair discusses how Clean Energy is meeting increasing fleet demand for decarbonized fuels and creating carbon-negative transportation outcomes for its customers today utilizing RNG.



Convene

NGV Leaders Recognized at NGV22

Thirteen organizations and individuals were honored at NGV America's 2022 Industry Summit and Annual Meeting in Charleston for their contributions toward the advancement of natural gas as a transportation fuel.

The 2022 NGV Achievement Award Recipients are:

- Pacific Green Trucking, Inc. Natural Gas Fleet Program
- Contract Transport Services, LLC Natural Gas Fleet Program
- City Furniture Natural Gas Fleet Program
- Denver International Airport Natural Gas Fleet Program
- Ecology Auto Parts Natural Gas Fleet Program
- Tops Friendly Markets Natural Gas Fleet Program
- Jacksonville Transportation Authority Natural Gas Transit Fleet Program
- SMART Wilsonville, OR Natural Gas Transit Fleet Program
- Jordan, UT School District Natural Gas School Bus Fleet Program
- DeKalb County, GA Natural Gas Public Fleet Program
- Chris Byers NGV Horizon Award
- Brent Tesla NGV Horizon Award
- Jim Arthurs Lifetime Achievement Award



NGVAmerica 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

Paul Sandsted

Director
Technology & Sustainability



NGVAmerica Team Members Sherrie Merrow, Jeff Clarke, Dan Gage, Matthew Brownlee, Lucas Blanchard, and Paul Sandsted at NGV22

Officers & Executive Committee

Seung Baik

Chair
Hexagon Agility
President

Marty Tufte

Vice Chair
WM
Corporate Fleet Director

Puneet Jhawar

Treasurer
Cummins Inc.
General Manager
Global Spark Ignited Business

Jeffrey Clarke

Secretary
NGVAmerica
Vice President
Regulatory & Government
Affairs and General Counsel

Jim Arthurs

Immediate Past Chair
JD Arthurs & Associates

Daniel Gage

NGVAmerica
President

Mitchell Pratt

Clean Energy Fuels
Chief Operating Officer
& Corporate Secretary

Charlie Ker

Westport Fuel Systems
Senior Director
Business Development North America

Jennifer Stokes

Key Account Manager
CenterPoint Energy

Mike Zimmerman

Cummins Clean Fuel Technologies
General Manager

NGV America Leadership

Board of Directors

Mallik Angalakudati

WGL
Senior Vice President
Strategy & Innovation Utilities

Eric Bevevino

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

Brett Brown

Dominion Energy
Manager
Operations

Adam Comora

OPAL Fuels
Co-CEO

Thomas Condon

New Jersey Natural Gas
Natural Gas Vehicle
Program Director

Joel Fasnacht

Kwik Trip, Inc.
Business Development -
Biogas/RNG
Commercial Cards -
Commercial & Alternative Fuels

Alan Garcia

NW Natural
Senior Director
Customer Lifecycle
Management

Todd Gordon

South Jersey Gas Company
Director of Business
Development

Gavin Gretter

Trillium
General Manager
RNG

Karen Harbert

American Gas Association
President & CEO

Jared Hightower

ANGI Energy Systems
Vice President of Sales

Dean Holden

Chesapeake Utilities Corporation
Manager
Sustainability & Growth

Sam Johnson

American CNG/DEMI
Owner & CEO

Annie Lawrence

United Parcel Service
Vice President
Government Relations

Blake Littauer

Puget Sound Energy
Director
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