



North Central Texas  
Council of Governments



Regional Transportation Council

**SMARTER**

Saving Money and Reducing Truck Emissions

## Saving Money and Reducing Truck Emissions Webinar Series

### Dollars and Cents: Costs and Funding

**Date:** Wednesday, May 20, 2026

**Time:** 1:00 – 2:00 PM Central Time

**Hosted** by the **North Central Texas Council of Governments (NCTCOG)**

**Register** in Microsoft Forms at:

<https://forms.microsoft.com/r/7RQTWUwv5m>

Webinar will be presented through **ZOOM**

**Contact:** Trey Pope, [tpope@nctcog.org](mailto:tpope@nctcog.org)

Jason Brown, [jbrown@nctcog.org](mailto:jbrown@nctcog.org)

#### **Presenters:**

Juliana VandenBorn, NCTCOG

Katie Vassalli, The Transport Project

# Overview



Image provided by Getty

## Welcome, Introduction

Presenter: Trey Pope, Transportation/Air Quality Planner, NCTCOG

## Fleet Funding Opportunities: NCTCOG Call for Projects and Texas Emissions Reduction Plan

Presenter: Juliana VandenBorn, Senior Air Quality Planner, NCTCOG

## Dollars and Cents: Incentivizing Clean Transportation

Presenter: Katie Vassalli, Director of Regulatory Affairs, The Transport Project

## Discussion

## Updates and Close



# Saving Money and Reducing Trucking Emissions Program



## GOALS

Promote emissions reduction and cost saving strategies within the trucking industry



## INITIATIVES

Build relationships within the trucking industry

Share information about emission reduction strategies

Connect SmartWay verified technology to trucking owner/operators and fleet managers

# SMARTTE

Saving Money and Reducing Truck Emissions





# SMARTe Webinar Series: Dollars and Cents

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Juliana VandenBorn, Senior Air Quality Planner  
North Central Texas Council of Governments / Dallas-  
Fort Worth Clean Cities

May 20, 2026

# Who We Are

Regional Planning Agency



Metropolitan Planning Organization (MPO)



Department of Energy-Designated Clean Cities Coalition



Sister Coalitions in Texas:

- Alamo Area Clean Cities (San Antonio)
- Central Texas Clean Cities (Austin)
- Houston-Galveston Clean Cities
- Apprentice Coalition: South Texas Clean Cities (Rio Grande Region)

## North Central Texas Council of Governments (NCTCOG) Region and Nonattainment Areas

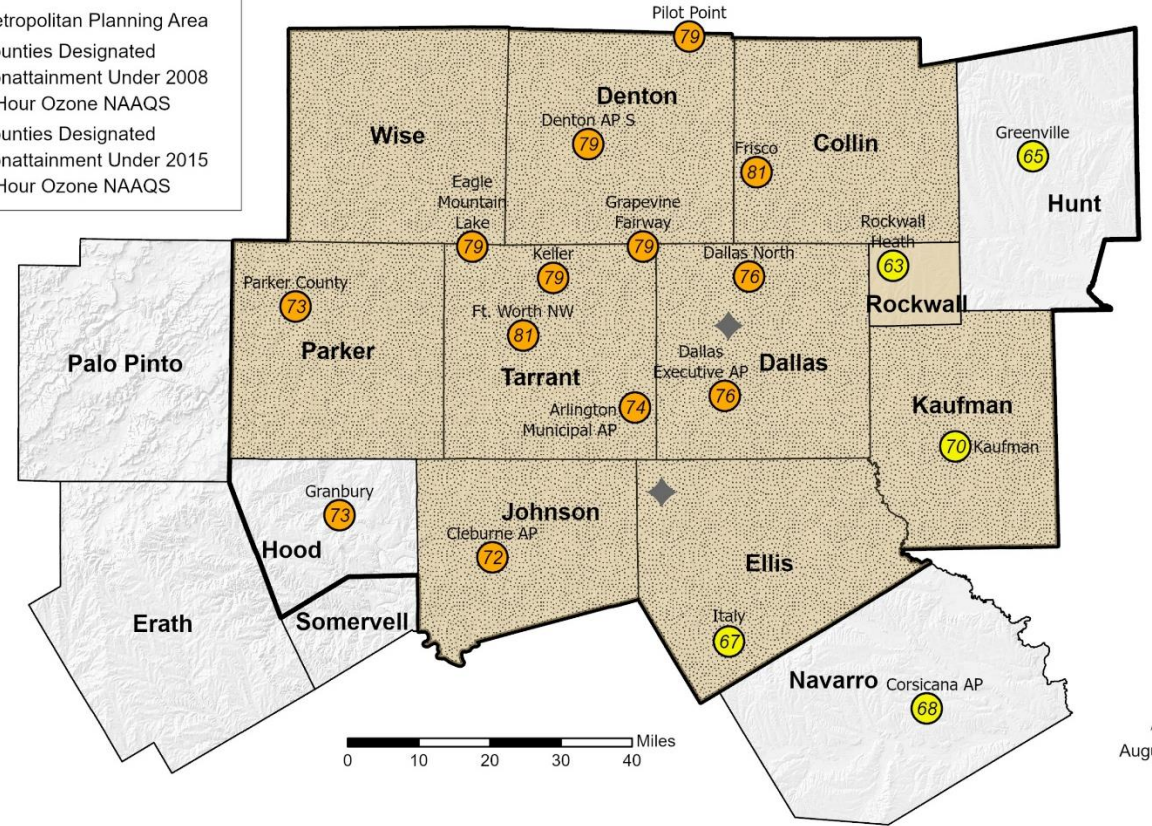
**Legend**

Ozone Design Value

- 0 - 70
- 71 - 85
- Out of Service

Metropolitan Planning Area

- Counties Designated Nonattainment Under 2008 8-Hour Ozone NAAQS
- Counties Designated Nonattainment Under 2015 8-Hour Ozone NAAQS



August 2025

Source: NCTCOG





# Alternative Fuels and Energy Team

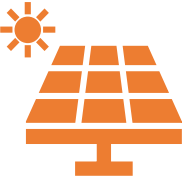
## Key Focus Areas & Goals



Clean Vehicle Initiatives



Alternative Fuel Infrastructure Initiatives



Energy Integration & Community Readiness

## What We Do



Funding Support



Technical Assistance



Planning the Future



Raising Awareness



# Prepping for a Grant Opportunity

## Typical Information Needed

### Old Vehicle:

- Identifying Number and Title
- Gross Vehicle Weight Rating
- Fuel Type and Year
- Typical Operations
- Scrappage Options

### New Vehicle:

- Fuel Type of New Vehicle
- Market Availability and Cost Estimate
- Refueling Needs

## Helpful Analysis

### Total Cost of Ownership:

- Evaluates differences total cost over lifetime of owning vehicle
- Helps determines amount of funding needed to “break-even”

### Potential Changes in Operations:

- Route length or frequency
- Refueling changes
- Changes in cargo/weight differences

### Emissions Savings:

- Can support company goals and improve regional air quality



# Alternative Fuels and Tools

- Biodiesel
- Electricity
- Ethanol
- Hydrogen
- Natural Gas
- Propane
- Renewable Diesel

[Alternative Fuels Data Center \(AFDC\)](#) – Information, data, and tools on alternative and renewable fuels, advanced vehicles, and other fuel saving measures

[Alternative Fueling Station Locator](#) – Locate alternative fuel stations; route mapping capability

[Electric Vehicles for Fleets](#) – Resources for fleet electrification, including available vehicle models and electrification checklist

[AFLEET](#) – Tool to compare new alternative fuel vehicles to gasoline (light-duty) and diesel (heavy-duty) vehicles, available as a spreadsheet or simplified online version

[Zero-Emissions Technology Inventory](#) – Search current and upcoming zero-emission medium- and heavy-duty vehicles

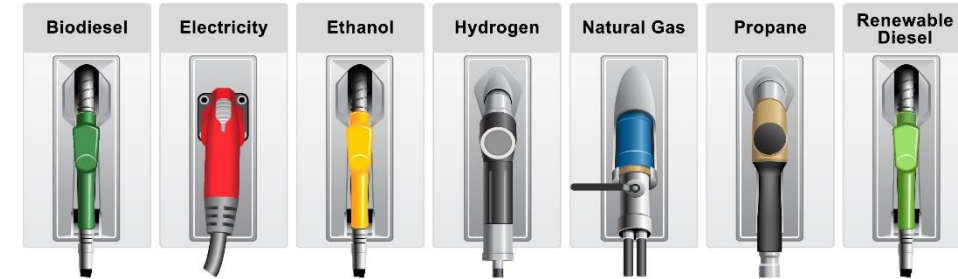
## Alternative Fuels Data Center

Fuels & Vehicles ▾

Conserve Fuel ▾

Station Locator ▾

Laws & Incentives ▾



# Total Cost of Ownership (TCO)

## What is TCO?

Total Annual Costs of a *New Vehicle Purchase* Over a Set Span of Years (Planner Ownership)

## What is TCO used for?

Estimate TCO of Alternative Fuel Vehicles (AFV) Compared to Conventional Vehicles

## What's included in TCO?

Vehicle Purchase Price

Fuel Costs

Maintenance and Repair Costs

License and Registration Fees

Insurance

Depreciation of the Vehicle

Note: TCO is a Recommended Step when Developing a Transition Plan for AFVs



# Total Cost of Ownership (TCO) Inputs

## Vehicle Type: Long Haul Freight Truck

Vehicle Type	Fuel Type	Cost	Incentive	Maintenance and Repair	Fuel Economy (MPDG)	Fuel Price*	Annual Mileage	Years of Ownership
Mack Pinnacle	Diesel	\$185,000	N/A	\$0.22	7.2	\$5.64	170,000	8
Freightliner Cascadia	CNG	\$250,000	\$16,355 (TERP TNGVGP)	\$0.23	6.5	\$2.80	170,000	8
Hino XL7	Biodiesel	\$185,000	N/A	\$0.22	7.2	\$5.64	170,000	8
Peterbilt 579EV	Electric	\$428,000	\$72,182 (TxVEMP All-Electric)	\$0.19	12.7	\$0.14	170,000	8

**Note:**

- Vehicle Type Makes and Models only used as examples, vehicle specifications NOT specific to Make/Model
- AFLEET Defaults used for ALL inputs, except diesel price

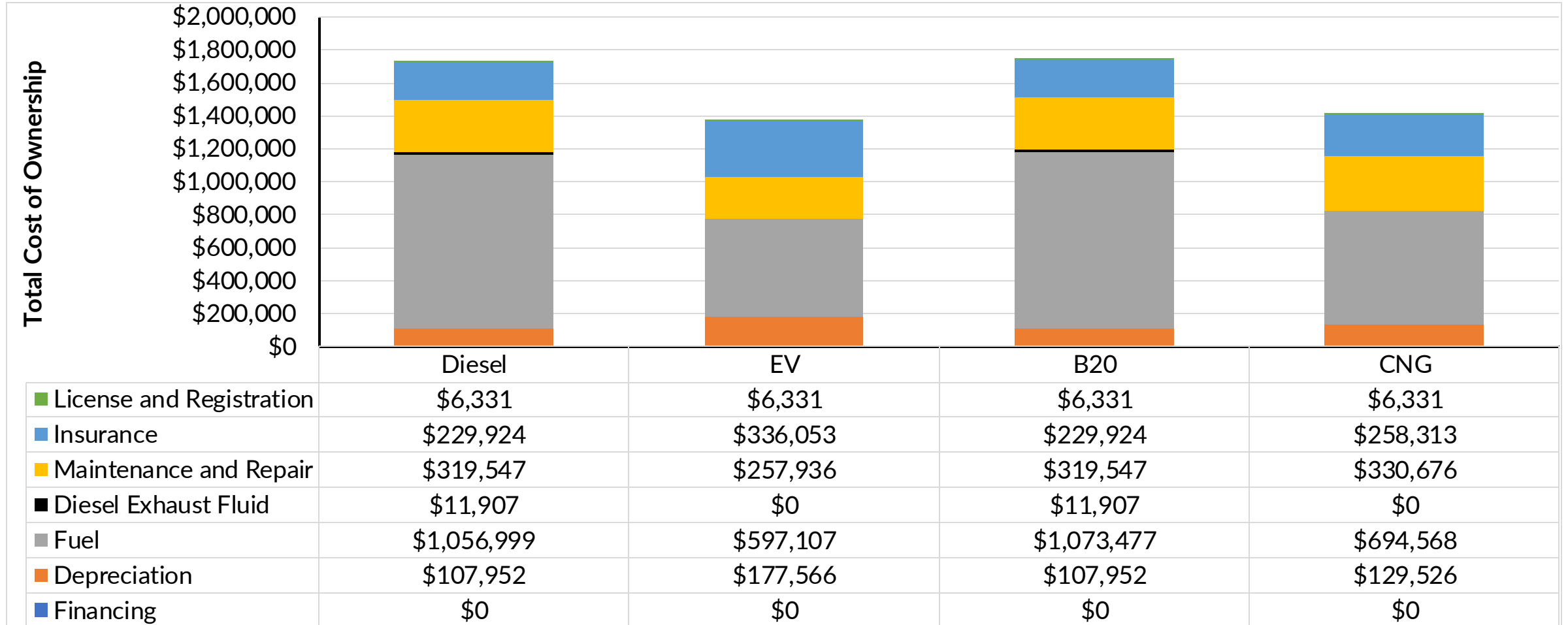
\*Diesel Price Sourced from [www.eia.gov](http://www.eia.gov) as of 5/4/2026



# Total Cost of Ownership (TCO) Results

## Vehicle Type: Long Haul Freight Truck

**\$72k & \$16k Incentives Applied to EV& CNG**



# Considerations for Vehicle Funding



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Can a vehicle be scrapped?



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Fuel type of new vehicle?



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Is infrastructure funding needed?



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Will other funding be used for the same vehicle?



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When will the new vehicle be purchased?

# NCTCOG Vehicle Rebates – Open Now!

Projects available at: [www.nctcog.org/trans/funds/cfps](http://www.nctcog.org/trans/funds/cfps)

Both public and private sector fleets eligible

Can fund supporting charging/fueling infrastructure, if needed

## North Texas Zero Emissions Vehicles Call for Projects

**Rebates to Replace Class 6 or Class 7 “vocational vehicles” with zero-emissions trucks**

Both battery electric and hydrogen fuel cell electric trucks eligible

Funding ranges from 33% to 80%

## North Texas Diesel Emissions Reduction Call for Projects – *Application Deadline is June 12*

**Rebates to Replace on-road diesel vehicles and equipment with lesser emitting fuels**

Replace vehicles with a GVWR of over 16,001 or non-road diesel equipment and drayage with GVWR of over 33,001 lbs

Replace diesel transport refrigeration unit with all-electric & Install EPA verified idle reduction technologies

Funding ranges from 25% to 45% for vehicles



# North Texas Zero Emissions Vehicles Call for Projects

*Application deadlines: 3<sup>rd</sup> Friday of every month at 5 pm, until funds are exhausted*

## No-Cost Applicant Resources

- Weekly Virtual Office Hours on Mondays at 10:00am
- Technical assistance from the National Lab of the Rockies
- Resources to help identify vendors/vehicles
- Call for Projects Workshop Recordings

Details at [www.nctcog.org/NTxZEV](http://www.nctcog.org/NTxZEV)



# State Funding for Heavy-Duty Vehicles

**Texas Emissions Reduction Plan (TERP):** Operates on a two-year cycle aligned with state budget; consists of 12 different programs

**Texas Volkswagen Environmental Mitigation Program (TxVEMP):** One-time funding program

Looking for?	Public or Private	Programs
ZEV Specific Programs for On-Road and Off-Road Vehicles	Both	<p>★ TxVEMP- All-Electric Grant Round- Open through August 31 on a first-come, first-served basis</p> <p>Texas Hydrogen Infrastructure, Vehicles, and Equipment – Expected to open August 2026</p>
Vehicle/ Equipment/Drayage Replacement/Repower Programs	Both	<p>★ Rebate Grants - Open through July 28 on a first-come, first-served basis</p> <p>★ Emissions Reduction Incentive Grants (ERIG) – Open through September 4, on a first-come, first-served basis</p> <p>Texas Natural Gas Vehicle Grant Program – Expected to Open in September 2026</p> <p>Seaport and Rail Yard Areas Emissions Reduction Program - Expected to August 2026</p> <p>Texas Clean Fleet Program - Expected to Open January 2027</p>
	Public Only	Governmental Alternative Fuel Fleet Grant Program – Expected to open Spring 2027
Infrastructure Only	Both	Alternative Fueling Facilities Program – Expected to Open in Winter 2027



# Other Strategies To Reduce Emissions and Save Money

## Strategies:

- Idle Reduction
- Driver Training
- Route Optimization
- Rightsizing
- Downsizing
- Drop-in Fuels

## Case Study on Idle Reduction from the City of Fort Worth:

- EMS units stage at fire stations and plug into shore power
- Eliminates engine idling during standby
- 12+ hours less idling per ambulance
- Estimated 12 to 18 gallons of fuel avoided per unit, roughly 230 to 400 lb CO2 avoided



# Get Involved with DFWCC

Contact us at [cleancities@nctcog.org](mailto:cleancities@nctcog.org) for any questions on fleet electrification, funding opportunities, or other inquiries

Upcoming webinars and events posted regularly at [dfwcleancities.org/events](https://dfwcleancities.org/events)

Sign up for DFWCC weekly email list and follow DFWCC LinkedIn at: [dfwcleancities.org/get-involved](https://dfwcleancities.org/get-involved)



# Contact Us



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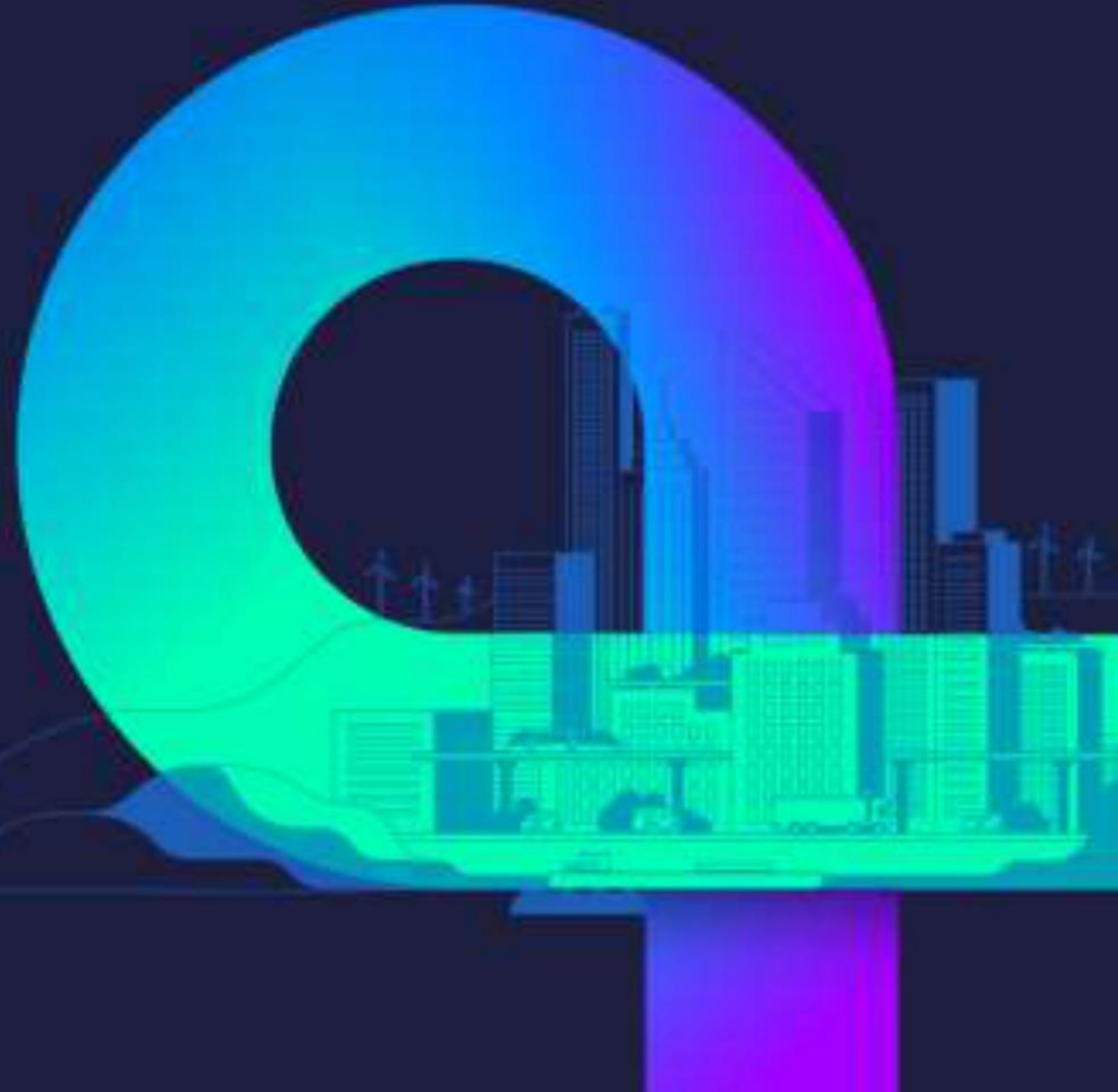
# Dollars & Cents: Costs and Funding

**KATIE VASSALLI**

Director, Regulatory Affairs

**North Central Texas Council of Governments**

May 20, 2026 | 1:00 p.m. (CT)



# KEY TOPICS

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**The Transport Project**  
**Natural Gas Transportation**  
**Federal & State Incentives**  
**Community Benefits**





**The Transport Project (TTP) is a national coalition of roughly 200 fleets, vehicle and engine manufacturers, dealers, fuel producers and retailers, equipment suppliers, and service contractors dedicated to the decarbonization of North America's transportation sector.**



# BOARD OF DIRECTORS: EXECUTIVE COMMITTEE



## Board Chair

Marty Tufte  
Corporate Fleet Director



CLEAN FUEL  
TECHNOLOGIES

## Board Vice Chair

Mike Zimmerman  
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## Board Treasurer

Ashley Remillard  
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BEYOND 6



Clean  
Energy



Southern Company  
Gas



Westport  
Fuel Systems



# BOARD OF DIRECTORS: MEMBERS AT LARGE



# DELIVERING VALUE TO THE GASEOUS FUELED VEHICLES INDUSTRY

**Federal & State Advocacy**

**Technologies & Development**

**Information Sharing & Education**

**Networking & Industry Events**

## **Policy Development & Member Engagement**

- Amplify industry's interests in legislative and regulatory actions impacting alternative transportation fuels and deployment of gaseous fueled vehicles
- Leverage relationships to engage federal and state policymakers and influence policy outcomes

## **Product Innovation & Continuous Improvement**

- Review and modernize codes and standards, operating and maintenance procedures, certification and testing requirements, and industry best practices
- Conduct surveys, perform data analysis, and develop educational resources including industry reports, guidance, and technical papers

## **Stakeholder Outreach & Industry Relationships**

- Connect industry leaders to share information, align on policy issues, and address common challenges

A semi-truck is shown on a road, with a dark blue overlay covering the entire image. The truck is positioned in the center-right of the frame, facing right. The background shows a road and some distant hills or mountains.

# NATURAL GAS TRANSPORTATION

Fuel Production & Use, Refueling Infrastructure and Fleet Applications



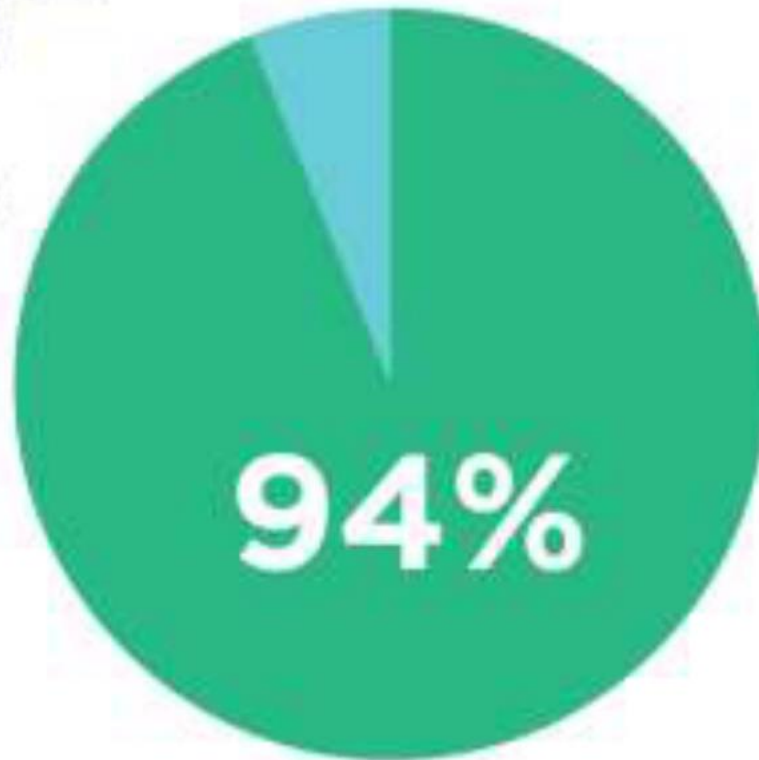
# NATURAL GAS TRANSPORTATION FUEL

## 2025 NGV Fuel Use

806 Million GGE Total

In 2025, **94%** of all on-road fuel used in natural gas vehicles was RNG.

- Conventional Natural Gas  
**51 Million GGE**
- Renewable Natural Gas  
**755 Million GGE**

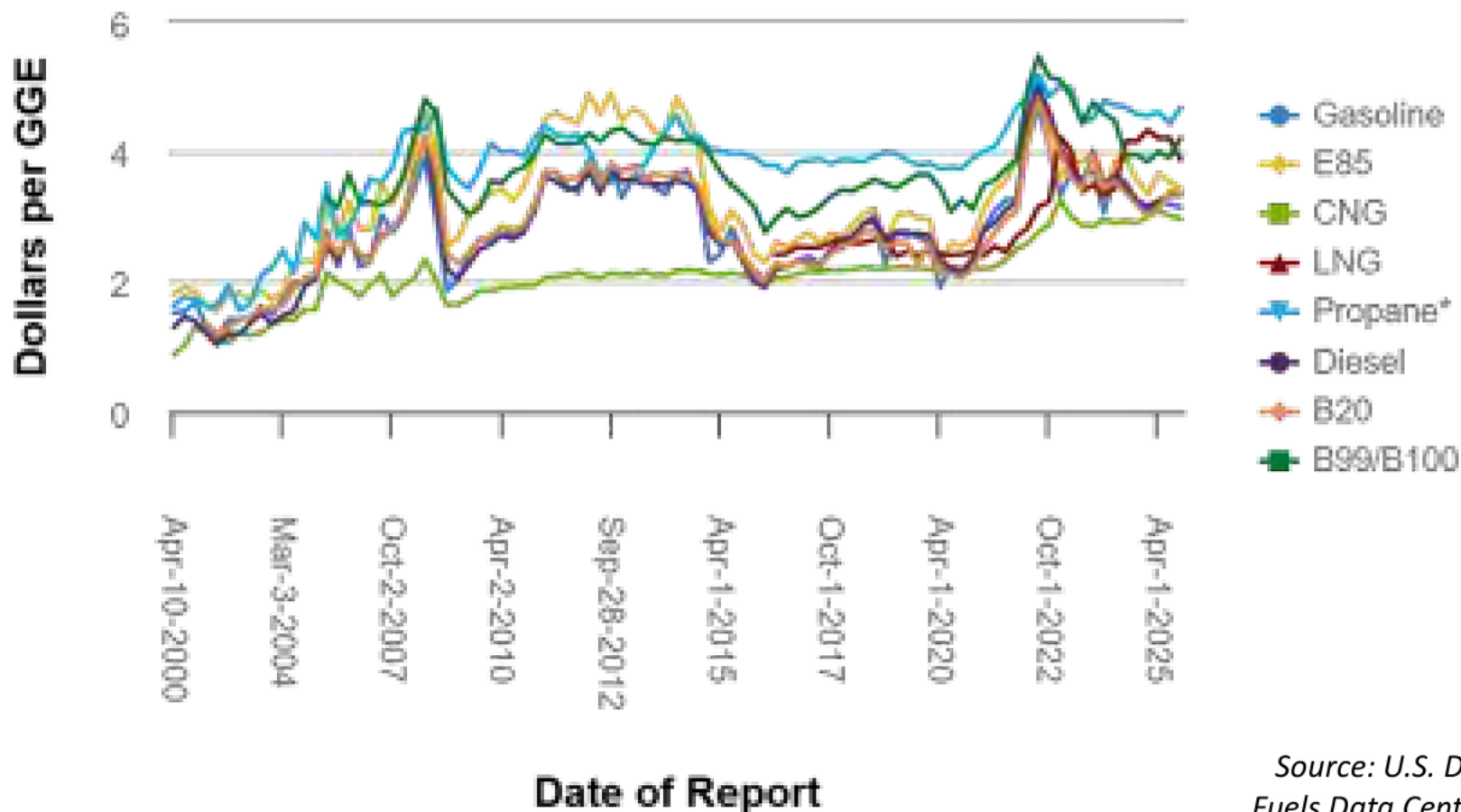


Based on average retail transportation fuel prices, in 2025 NGVs helped fleet operators save nearly \$630 million in fuel costs compared to what they would have paid for the same amount of conventional diesel fuel.



# RETAIL TRANSPORTATION FUEL PRICES

## Average Retail Fuel Prices in the United States



### National Average Price (October 1 and 15, 2025)

Gasoline	\$3.14/gallon
E85	\$2.63/gallon
<b>CNG</b>	<b>\$2.96/GGE</b>
LNG	\$4.36/DGE
Propane	\$3.42/gallon
Diesel	\$3.74/gallon
B20	\$3.74/gallon
B99/B100	\$4.30/gallon

Source: U.S. Department of Energy, Alternative Fuels Data Center, Fuel Price Report, January 2026



# RENEWABLE NATURAL GAS PRODUCTION & USE

## RNG Production Facilities



**570**

In operation



**153**

under construction



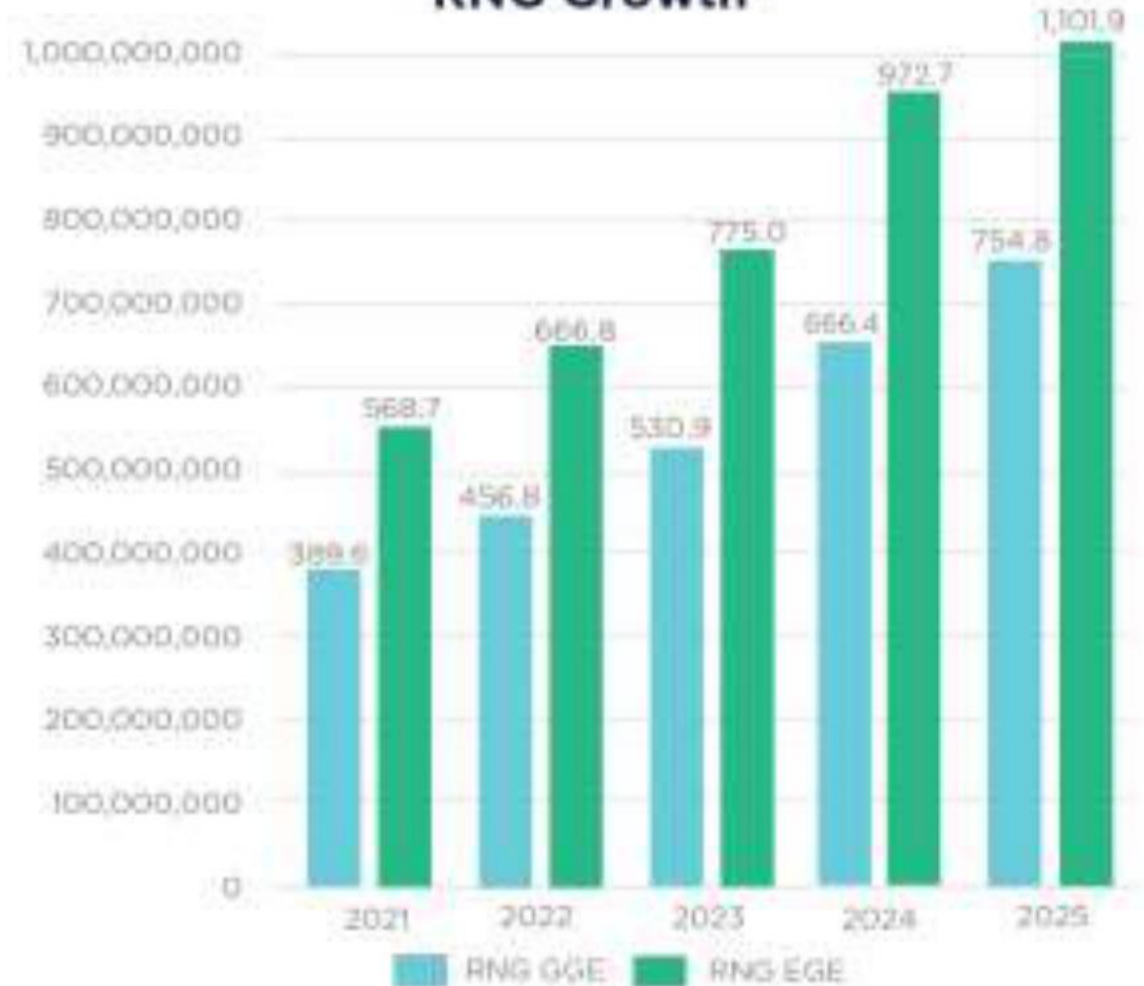
**300**

In development

Note: RNG Coalition (U.S. and Canada Year End 2025)

**Renewable Natural Gas (RNG) use as a transportation fuel grew 13% over 2024 volumes, increasing 94% over the last five years.**

## RNG Growth



# NGV REFUELING INFRASTRUCTURE

There are nearly 1,600  
public CNG/LNG  
stations in the U.S. and  
Canada. More and  
more are dispensing  
100% RNG.



# CNG/RNG TRANSPORTATION INVESTMENTS IN TEXAS



## Estimated \$130 Million Investment in Texas Refueling Infrastructure

- 96 CNG Stations (61 public, 35 private) predominantly fueling vehicles with RNG
- 7 LNG Stations (5 public, 2 private) with 100% public stations dispensing RNG
- 57 RNG Production Facilities

The national NGV refueling infrastructure database and station locator is available at:

<https://transportproject.org/fuel/>

Source: DOE Alternative Fuels Data Center



# CNG/RNG FLEET APPLICATIONS: LOCAL TRASH & TRANSIT VEHICLES



## **Refuse**

Over 17,000 natural gas refuse trucks operate across the country and about 80% of new trucks on order are NGVs.



## **Transit Buses**

Over 14,000 natural gas powered buses are on the road today. Dallas Area Rapid Transit Fleet runs more than 800 vehicles on RNG.



## **School Buses**

More than 150 U.S. school districts operate 5,500 natural gas powered vehicles in their fleets.



# CNG/RNG FLEET APPLICATIONS: LIGHT- & MEDIUM-DUTY SERVICE TRUCKS

For regional haul and vocational fleets operating Class 5, 6 and 7 medium-duty trucks, natural gas vehicles offer a proven alternative to conventional diesel and gasoline vehicles due to the availability of domestically produced natural gas along with substantial growth in RNG production in the U.S.



# CNG/RNG FLEET APPLICATIONS: HEAVY-DUTY, LONG-HAUL TRUCKS



## Heavy Duty Trucks

High mileage carrier fleets consume enough fuel for operators to see a payback from their NGV investment within 18–24 months.

**RNG is the only available alternative fuel that long-haul fleets can adopt at scale to meet operational demands.**



*Infographic Provided by TTP Member, Hexagon Agility*





# Federal & State Incentives

Funding Opportunities for Natural Gas Fueling Infrastructure & Vehicles



# FEDERAL PROGRAMS, INCENTIVES & TAX CREDITS

## PROGRAMS

- Clean Cities and Communities
- Clean Construction and Agriculture Ports Initiative
- Congestion Mitigation and Air Quality Improvement Program
- Diesel Emissions Reduction Act
- Environmental Justice Community Technical Assistance Program
- Low or Zero Emission Ferry Program
- National Highway Performance Program
- Public School Energy Program
- SmartWay Transport Partnership
- Surface Transportation Block Grant Program
- Voluntary Airport Low Emission

## INCENTIVES

- Advanced Biofuel Feedstock Rebates
- Bus and Bus Facilities Grants
- Charging and Fueling Infrastructure Grants
- **Clean School Bus Grants**
- Community Waste-to-Biofuel Development Grants
- Low and Zero Emission Public Transportation Funding

- National Alternative Fuels Corridors
- Public Transportation Research, Demonstration, and Deployment Funding
- Resilient Surface Transportation Grants
- State Energy Program (SEP) Funding

*pending*

## TAX CREDITS & EXEMPTIONS

- Alternative Fuel Infrastructure Tax Credit
- Alternative Fuel Tax Exemption
- **Clean Fuel Production Credit (45Z)**
- NGV and EV Weight Exemption



# STATE INCENTIVES & EXEMPTIONS

*TCEQ Accepting Applications*

## Texas Emissions Reduction Program

- Emissions Reductions Incentive Grants
- **NGV Grants** *opening in July*
- Heavy-Duty Vehicle and Equipment Grants (Rebate Grants)
- Hydrogen Infrastructure, Vehicle & Equipment Grants *opening in August*
- Clean Fleet Grants *opening in January*
- Clean School Bus Grants
- Government Fleet Grants *opening in December*
- Alternative Fueling Facilities Grants
- Seaport and Rail Yard Emissions Reduction Grants *opening in August*

## Rebates

- Light-Duty Alternative Fuel Vehicle Rebates

## Exemptions

- Biofuel Blend Tax Exemption
- Idle Reduction Weight Exemption
- Weight Exemption for EVs & NGVs
- EV Emissions Inspection Exemption



# TX NATURAL GAS VEHICLE GRANT PROGRAM

## Issue: Program Utilization

- Overly restrictive eligibility requirements requiring grantees to either destroy a working vehicle or sell the vehicle being replaced to a buyer located outside of the U.S., Canada and Mexico limit funding utilization/industry participation.
- Of the \$25 million in available funding, only \$3.94 million awarded 2025

## TTP Policy Recommendation:

- Amend legislative statute to ease the vehicle resale restrictions by allowing grantees the option of selling existing diesel vehicles to fleet owners operating in North America, but not within in a state contiguous with Texas.
- Amend TCEQ program guidance to clarify what documentation is required to demonstrate that a replaced vehicle has been permanently removed from service.





# COMMUNITY BENEFITS

Local Investment, Lower Fuel Prices, and Emissions Reductions



# NGVs SPARK INVESTMENT IN RURAL AREAS

## Castro County Project South Fork Dairy | Dimmitt, TX

- Total Investment: \$85 Million
- 16,000 dairy cows
- 300,000 gallons manure per day
- 2.6 million gallons of RNG annually
- Impact: 10.6% of Castro Co. GDP



# NGVs DELIVER FUEL COST SAVINGS



Source: City of Tacoma Solid Waste Services, August 2025



# NGVs ACHIEVE EMISSIONS REDUCTION GOALS

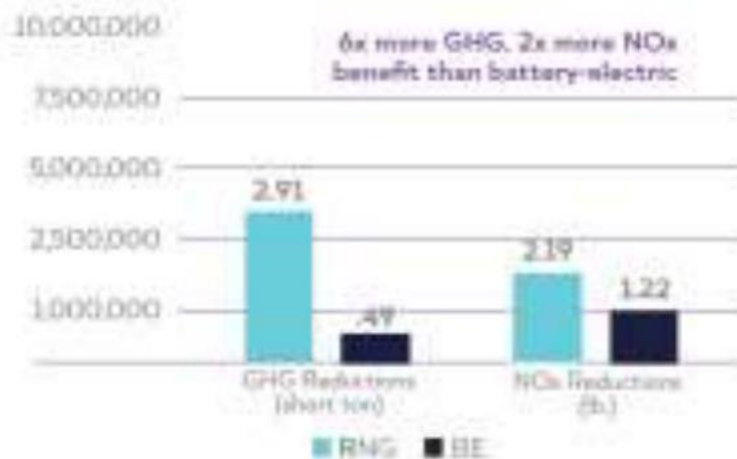
## What a \$100 million investment achieves

If the grant covers full cost of truck...

Number of new trucks on road



Emission reductions impact

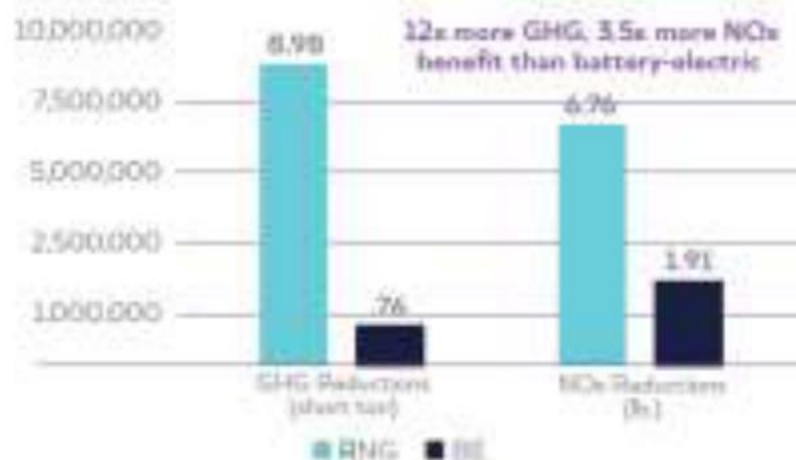


If the grant covers incremental cost only...

Number of new trucks on road



Emission reductions impact



Note: Class 8 truck costs estimated at \$156,000 for diesel, \$231,000 for natural gas, and \$436,000 for battery-electric, leaving incremental costs of \$75,000 for natural gas and \$280,000 for battery-electric. Costs do not include refueling infrastructure. Emissions assumptions include 11 replacement and same mileage per truck per year regardless of powertrain. Natural gas emission values derived from a rough 25/75 landfill gas/anaerobic digester (dry & wet) RNG mix as reported above.



# NGVs IMPROVE CLIMATE FOOTPRINT

## 2025 RNG Use in Transportation...



Lowered GHG emissions equivalent to **28,047,631,259** miles driven by the average passenger car



Reduced CO<sub>2</sub> emissions equal to **1,239,330,595** gallons of gasoline consumed

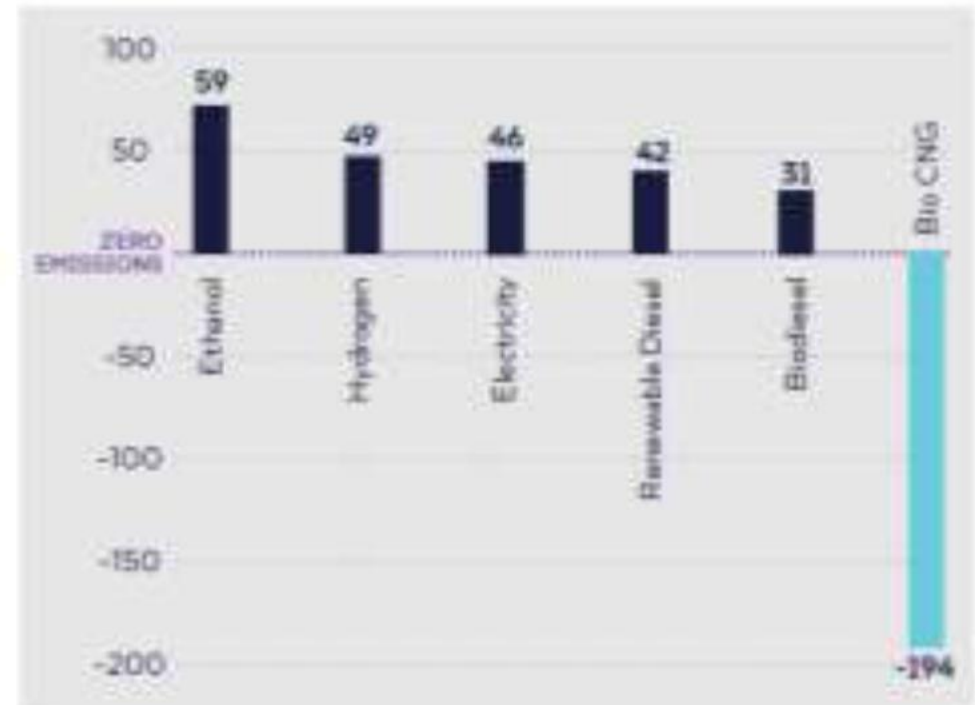


Sequestered carbon equal to growing **182,116,296** tree seedlings for ten years



or **11,047,623** acres of U.S. forests for one year

## CA LCFS 2024 Renewable Fuels Average CI Score (gCO<sub>2</sub>e/MJ)



Note: Baseline conventional diesel carbon intensity = 100.45. Data from CARI's LCFS Reporting Tool Quarterly Summaries (Bio-LNG not listed as bio-CNG accounts for more than 94 percent of all RNG used in on-road vehicles)



# KEY TAKEAWAYS

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## The Transport Project Transportation Basics Federal & State Incentives Community Benefits

- ✓ TTP serves serve as the national voice advancing the growth and deployment of practical, clean, gaseous fuels for transportation
- ✓ RNG is a reliable alternative fuel that meets the operational demands of medium- and heavy-duty fleets. It is the only alternative fuel that has a negative carbon intensity score, making it ideal for decarbonizing the transportation sector.
- ✓ Review existing federal and state incentive programs, funding needs, and barriers to greater industry participation
- ✓ Investments in RNG production and infrastructure promote localized economic growth, save fleet operators on fueling costs, and reduce the environmental impacts of mobile sources.
- ✓ Dollar for dollar, NGVs provide a proven, cost-effective means for improving air quality within urban and rural areas by lowering NOx emissions from the transportation sector.





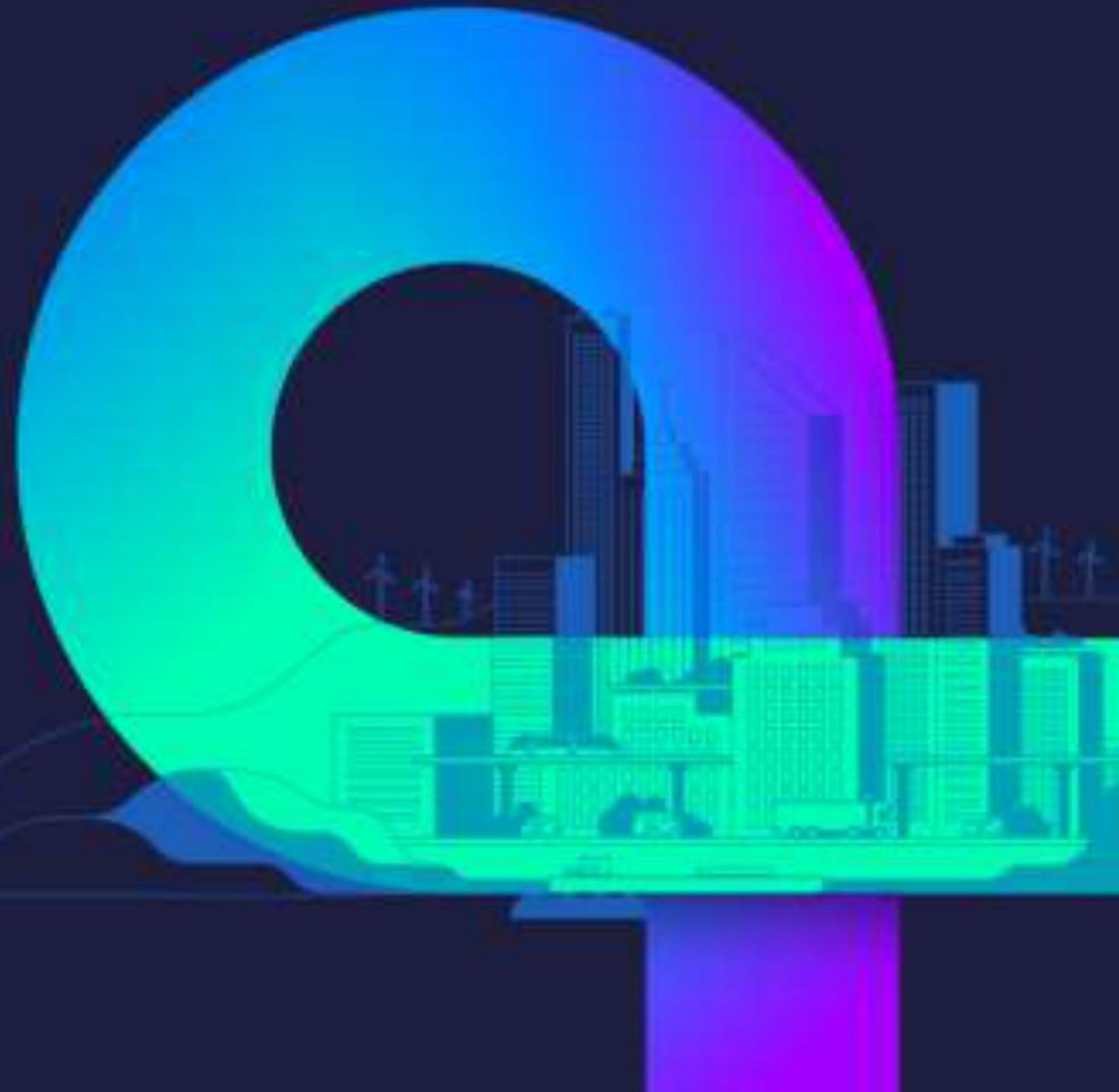
# KATIE VASSALLI

Director of Regulatory Affairs

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<https://www.transportproject.org>

# Next SMARTE Webinar Session:

Preparing the Workforce for the EV Transition  
Thursday, 7/16/26, 11 a.m. CT

Presenter:

- Angela Amirkhanian, TRC Companies

Register here in Microsoft Forms:

<https://forms.microsoft.com/r/tqeC4Mumf0>



# Contact Us



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