





Renewable Natural Gas & Renewable Propane Webinar Resource Guide, August 2023

Upcoming Lunch and Learn Webinar Workshop

How to Apply for the Natural Gas and Propane Motor Vehicle Federal Tax Credit

December 5, 2023 12:00 pm - 12:45 pm Central Time

Register <u>Here</u>

Webinar link: Webinars – Houston-Galveston Clean Cities Coalition (houston-cleancities.org)

Webinar Resource Guide as a <u>link</u>.

Key Webinar Points:

- Renewable natural gas can be made from landfill, livestock or crop waste. It is fully
 interchangeable with conventional natural gas and can be used in the same pipeline,
 equipment, etc. Scroll to the <u>last page of this guide</u> for the Coalition for Renewable Natural Gas
 list of RNG plants currently operating or planned to be operating in Texas.
- Similarly, renewable propane is made primarily from plant and vegetable oils, animal fats or
 used cooking oil and is fully interchangeable with conventional propane and can be used in the
 same tanks and equipment, etc. According to the Propane Education and Research Council,
 significant investments have been made in propane feedstock and refineries which are
 projected to increase availability and decrease costs of renewable propane beginning in 2024.

Renewable Natural Gas (RNG)

Renewable Natural Gas (RNG) is a pipeline-quality gas that is fully interchangeable with conventional natural gas and can be used in natural gas vehicles. RNG is essentially biogas (the gaseous product of the decomposition of organic matter) that has been processed to purity standards. Like conventional natural gas, RNG can be used as a transportation fuel in the form of Compressed Natural Gas (CNG) or Liquefied Natural Gas (LNG). RNG qualifies as an advanced biofuel under the Renewable Fuel Standard (RFS).

General information on RNG may be found at the <u>U.S. Environmental Protection Agency's (EPA)</u>
<u>RNG Website</u> and on the <u>Texas Natural Gas Foundation Website</u>

Renewable Natural Gas Production

The US Department of Energy's <u>Alternative Fuels Data Center</u> (AFDC) provides information on renewable natural gas production. Additionally, the AFDC Renewable Natural Gas webpage provides the biomass sources that qualify RNG as an advanced biofuel under the RFS.

Argonne National Laboratory's <u>RNG for Transportation Frequently Asked Questions (FAQ)</u> provides an overview of RNG.

Renewable Identification Numbers (RINs)

The U.S. Environmental Protection Agency (EPA) administers the RFS program and tracks compliance through the RIN System, which assigns a RIN to each gallon of renewable fuel. EPA tracks production and use of qualifying renewable fuel using Renewable Identification Numbers (RINs).

RINs are generated by renewable fuel producers or importers and are bought and sold "attached" to the renewable fuel until the fuel is purchased by an obligated party (e.g., a refiner or importer of gasoline or diesel fuel). At that point the RIN is "separated" from the fuel and may thereafter be independently bought or sold until it is retired to meet an obligated party's renewable volume obligation.

Visit the EPA RINs Under the RFS Program website for more information.

Renewable Propane

Renewable propane can be made from a variety of renewable feedstocks and have even lower carbon emissions when compared with other energy sources. The most common form of renewable propane today is a byproduct of renewable diesel and sustainable aviation fuel made primarily from plant and vegetable oils, animal fats, or used cooking oil.

The Propane Education and Research Council (PERC) <u>Renewable Propane</u> website provides general information and compares renewable propane to other energy sources.

The AFDC <u>Propane Production and Distribution</u> website provides further information on how renewable propane is produced and distributed.

Department of Energy's Clean Cities Program

Housed in the Department of Energy's Vehicle Technology Office, there are approximately 75 designated Coalitions like Lone Star Clean Fuels Alliance and Houston-Galveston Clean Cities Coalition across the nation participating in the national Clean Cities Program. Each Coalition is fuel neutral with an aim to educate businesses. governments and organizations on the options within alternative fueled vehicles, fuel efficient technologies and energy-efficient mobility systems.

Speaker Bios

J. Ben Finley
Senior Program Coordinator, <u>Houston-Galveston Area Clean Cities</u> (HGCCC)
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ben.finley@h-gac.com

The HGCCC was originally created in 1997, and promotes advanced transportation solutions through outreach and education activities. The HGCCC catalyzes, connects, and facilitates implementation of alternative fuels and advanced vehicles. The Coalition works closely with H-GAC's Clean Vehicles Program and other funding initiatives to assist organizations secure funding for projects. The HGCCC region includes the counties of: Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller.

Elizabeth Munger

Director, Lone Star Clean Fuels Alliance (LSCFA) - Clean Cities Coalition serving Central Texas 512-694-1004

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Designated as a Clean Cities Coalition in 1994, the LSCFA is a stand-alone nonprofit located in Austin. It works closely with the Capital Area Council of Governments and other non-profit and industry organizations to assist businesses in deploying cleaner vehicles and technologies. LSCFA spans Bastrop, Caldwell, Hays, Travis, and Williamson counties.

Eddie Murray - <u>presentation link</u>
Business Development, <u>Freedom CNG</u>
832-223-1189
eddiemurray84@gmail.com

Eddie Murray has over 30 years of experience working in industries including Malt Beverage, Media and Energy. He has been in sales, marketing, and management for companies including Labatt, InBev USA. His assignments have been with Southwestern Energy and currently with Freedom CNG where he leads the effort to develop Compressed Natural Gas for transportation and local delivery companies for the past 9 years.

Murray is a professional with a track record and passion for growing profitable businesses.

Areeb West - <u>presentation link</u>
Renewables Account Manager, <u>AmeriGas</u>
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Areeb's most recent experience is in renewable natural gas (RNG) compliance, which included quality assurance/control over the generation, distribution, and marketing of credits (CFP, LCFS and RINs). She also has experience in midstream oil & gas accounting and settlements, internal audit, and contract compliance.

West lives in Houston and is passionate about renewable energ	gy.
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Josh McAdams
Vice President, McAdams Propane
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Josh is a 2006 graduate of Texas A&M University with a bachelor's degree in business management from the Mays School of Business. Upon graduation from Texas A&M University, Josh joined Enterprise Products and held roles in transportation logistics, wholesale propane, and pipeline allocation. In 2008 Josh joined his family's business where he oversees all internal and external operations, business development, and accounting.

McAdams Propane's footprint covers the eastern side of Texas with 7 locations supplying over 12,000 end user propane customers in a variety of markets.

In 2014, Josh founded and became a partner in <u>Midstream Transportation Company</u>. Midstream Transportation Company is a liquids bulk carrier that covers the Gulf Coast region of the US that specializes in transporting by truck and transloading by rail all NGLs and crude oil.

Bryan Cordill - <u>presentation link</u>

Director of Residential Business Development, <u>Propane Education and Research Council</u> 318-418-0376

bryan.cordill@propane.com

Bryan spent 17 years working as sales manager for his family's propane business, Cordill Butane-Propane Service, an independent propane supplier in Northeast Louisiana. In this role Bryan worked across all new markets including propane autogas adoption for local and national fleets. Bryan has a master's degree in industrial and organizational psychology from Louisiana Tech University, and lives in Monroe, Louisiana.

Will O'Connor - <u>presentation link</u>
Fleet Division Manager, <u>City of Austin (Texas) Fleet Mobility Services</u>
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Will has had a remarkable 30-year career in the automotive industry. He has risen to prominence as the Emerging Technologies Division Manager for City of Austin Fleet Mobility Services. In his 15-year tenure with the City of Austin, he has been a driving force behind the city's commitment to sustainable transportation solutions. His responsibilities encompass managing 42 fuel sites,

implementing alternative fuel and battery electric vehicle programs, integrating advanced telematics, and overseeing Fleet Information Management systems.

Will is a key figure in revolutionizing Austin's fleet operations and fostering a greener, more technologically advanced future for the city. Through his tireless efforts, O'Connor continues to shape the landscape of urban mobility and environmental sustainability.

Anthony Willis - <u>presentation link</u>
Fleet Maintenance Supervisor, <u>Elk Grove Unified School District (California) Transportation</u>
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Anthony has been in the automotive field since 2011, and officially as a technician since 2013. He previously was a mechanic, and is now a supervisor overseeing about 200 buses and 600+ other district vehicles.

Elk Grove currently operates 32 propane buses, 10 electric buses, and 15 CNG buses in addition to their diesel fleet.

Brett Barry - <u>presentation link</u> Policy Director, <u>Clean Energy</u> 562-522-7427 bbarry@cleanenergyfuels.com

Brett is responsible for advancing state-level policies in the eastern half of the country which support the use of renewable natural gas in the transportation sector. He was at the forefront of the successful effort to establish a uniform method of sale and taxation for natural gas motor fuels throughout the continental United States.

Clean Energy is North America's largest provider of renewable natural gas for the transportation sector with 570+ refueling stations throughout the United States and Canada. Prior to joining Clean Energy in 2012, he served as a Policy Analyst for Pennsylvania House Majority Whip Stan Saylor and worked closely on legislative matters related to the development of the Marcellus Shale. Brett serves on the board of the Low Carbon Fuels Coalition and the Texas Clean Fuels Alliance.

Contacts

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Heather Ball
Executive Director, <u>American Energy Institute</u>, <u>Texas Natural Gas Foundation</u>
512-484-8535

Heather was as director of marketing for alternative fuels at the Texas Railroad Commission, where she was very active in educating, grant writing and supporting propane and natural gas vehicles. She co-founded the Texas Natural Gas Foundation now the American Energy Institute. She continues to advocate for the critical role of Texas energy resources in securing U.S. energy independence, cleaner air and water, support for education and a vibrant entrepreneurial economy.

David Cox
CEO, Coalition for Renewable Natural Gas
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Jackie Mason
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Coalition for Renewable Natural Gas List of Operational and Planned RNG Sites in Texas (8/25/23)

Feedstock(s)	State	City	End Use	
Municipal Solid Waste	TX	Alta Loma	Transportation Fuel	
Municipal Solid Waste	TX	Alvarado	Transportation Fuel	
Municipal Solid Waste	TX	Alvin	Transportation Fuel	
Municipal Solid Waste	TX	Anderson	Transportation Fuel	
Municipal Solid Waste	TX	Angleton	Transportation Fuel	
Municipal Solid Waste	TX	Arlington / Euless	Transportation Fuel	
Municipal Solid Waste	TX	Beaumont	Transportation Fuel	
Ag Waste	TX	Cactus	Transportation Fuel	
Ag Waste	TX	Como	Transportation Fuel	
Food Waste / SSO*	TX	Dalhart	Transportation Fuel	
Municipal Solid Waste	TX	Dallas	Transportation Fuel	
Municipal Solid Waste	TX	Edinburg	Transportation Fuel	
Ag Waste	TX	Energy / Gustine	Transportation Fuel	
Municipal Solid Waste	TX	Ennis	Transportation Fuel	
Municipal Solid Waste	тх	Ferris	Transportation Fuel	
Municipal Solid Waste	TX	Fort Worth	Transportation Fuel	
Food Waste / SSO	TX	Fort Worth		
Municipal Solid Waste	TX	Fresno	Transportation Fuel	
Ag Waste	TX	Friona	Transportation Fuel	
Municipal Solid Waste	TX	Garland	Transportation Fuel	
Food Waste / SSO	TX	Houston	Unknown	
Municipal Solid Waste	TX	Houston	Transportation Fuel	
Municipal Solid Waste	TX	Houston	Transportation Fuel	
Municipal Solid Waste	TX	Humble	Transportation Fuel	
Municipal Solid Waste	TX	Hutto	Transportation Fuel	
Municipal Solid Waste	TX	Iowa Park	Transportation Fuel	
Municipal Solid Waste	TX	Kilgore	Transportation Fuel	
Municipal Solid Waste	TX	Lewisville	Transportation Fuel	
Municipal Solid Waste	TX	Melissa	Transportation Fuel	
Municipal Solid Waste	TX	Needville	Transportation Fuel	
Wastewater	TX	San Antonio	Transportation Fuel	
Municipal Solid Waste	TX	San Antonio	Transportation Fuel	
Food Waste / SSO	TX	San Antonio		
Municipal Solid Waste	TX	Tyler	Transportation Fuel	
Municipal Solid Waste	TX	Weatherford	Transportation Fuel	
Ag Waste	TX		Transportation Fuel	
Ag Waste	TX		Transportation Fuel	
Municipal Solid Waste	TX		Transportation Fuel	
Municipal Solid Waste TX Transportation Fuel * Source Separated Organics: yard trimmings, wood waste, paper fibers				