



Gaining Traction for a New Decade

This edition discusses Colorado's shift toward renewable natural gas (RNG) as the source for CNG, Ford's MY 2020 CNG and LPG truck and van offerings, and plans for improving incentives and market dynamics for NGVs in the Colorado Region. Proposed NHTSA CNG tank rules, Redmark's new product offerings and a calendar of events are also presented. This edition of Redmark E-News is long but worth the read.

- Featured Stories -



X3CNG Commits to RNG at its Colorado Fueling Stations

The largest operator of public CNG fueling stations in Colorado has made a commitment to move its CNG fuel supply toward renewable natural gas (RNG) in 2020. [X3CNG](#) (aka, X3Energy) partnered with another CNG provider in 2017 to combine each company's CNG fueling sites into a joint venture, which is run today by X3Energy and led by James Mora. This joint venture includes 8 public-access CNG fueling stations along the Colorado Front Range.

RNG sources of supply are growing and have become available with low or even negative greenhouse gas (GHG) emissions, as scored by the California Air Resources Board's (CARB) Low Carbon Fuel Standard (LCFS) program. Fleets with natural gas vehicles (NGVs) can further reduce their environmental footprint if they fuel with RNG. Currently, the LCFS program credits are not available in Colorado but RINs credits (Renewable Identification Numbers, under the US EPA Renewable Fuel Standard program) help drive down the cost of RNG.

NGVs that use RNG can have an environmental profile similar to electric vehicles (EVs) charging with mostly renewable electricity – both for GHG emissions like CO₂ and criteria pollutants like NO_x. In Colorado, there is one RNG production facility in Grand Junction, facilities are being developed in Longmont and Englewood, and others are planned. RNG produced in other states can be fed into the interstate natural gas pipelines for delivery to CNG fueling stations in Colorado. The Colorado Energy Office (CEO) recently issued its [first RNG study](#) (a follow-on RNG study and LCFS study should be available in 2020).



Some states are adopting the LCFS credit trading program as a further mechanism to push the cost of RNG below traditional fossil CNG prices. Alternatively, other states are looking at programs that provide benefits similar to the LCFS program such as creating financial incentives to off-set the development costs of RNG production facilities. RNG production is typically based at municipal waste water treatment, landfill and animal agriculture operations. For fleets that use RNG, the corporate social responsibility value can generate clear marketing and financial benefits beyond the low cost of the fuel.

X3Energy's commitment to make RNG available at its Colorado CNG fueling stations will mean that existing fleet NGVs and new NGVs will benefit from this environmentally friendly fuel. We also hope to see other CNG public fueling station operators and fleets with private CNG fueling stations move toward RNG. See our story below about how new and future financial incentives in Colorado for NGVs may be tied to RNG use.



State of
COLORADO

Colorado NGV Market Dynamics are Changing

For a number of years Colorado set aside a portion of its federal transportation funding (known as CMAQ) as grants for fleets to buy EVs and NGVs and for CNG fueling stations and EV charging facilities. Funds were allocated by the Colorado Department of Transportation ([CDOT](#)) to various councils of governments and the Regional Air Quality Council ([RAQC](#)). Additional funds were made available by the Colorado Department of Local Affairs.

In 2014, the State legislature passed HB 14-1326 supported by a large coalition of businesses, environmental groups, stakeholders and trade associations such as the [Colorado Motor Carriers Association](#), which created tax credits and other incentives for the purchase of alternative fuel vehicles (AFVs). This legislation also had the support of natural gas producers, utilities and other energy companies – and OPEC was doing a good job of keeping oil prices high, helping to make AFVs attractive.

However, over the past few years the Federal Highway Administration surprisingly stopped processing paperwork needed for certain uses of CMAQ funds, effectively shutting down AFV grants. And, the tax credits were scheduled to start dropping in value in 2019 and to be eliminated after 2021. Oil prices recovered only modestly after the crash in 2015, to half the peak price of over \$100 per barrel. Today, RNG supply in the US is mostly being sent to California and new, very clean natural gas engines (e.g., [Cummins low NOx engine family](#)) require incentives for fleets to buy them.



COLORADO
Department of Transportation

In response, EV stakeholders partnered with the Colorado legislature in early 2019 to modify portions of the statute created by HB 14-1326 – now tax credits for EVs extend past 2021. Similar changes to the statute for NGVs that fuel with RNG are now being considered. Fortunately, the new VW diesel emissions violation settlement funds allocated to Colorado (available to class 4 and larger vehicles as well as certain industrial vehicles

like baggage tractors) are now available as cash grants to fleets buying EVs and NGVs fueling with RNG (at RAQC and CDOT). And, natural gas utilities are looking at buying RNG and selling it in blocks to CNG fueling station owners much like electric utilities buy wind power and sell it in blocks of energy to end-users.

This has set the stage for EVs fed with increasing amounts of renewable electricity and NGVs fueled by RNG to be leveraged by policy makers seeking clean transportation solutions for Colorado. Further, we need to find ways for State of Colorado agencies to deploy more EVs and NGVs fueled by RNG (to demonstrate leadership), best-in-class tracking methods for RNG from source-to-use, and identifying special sources of natural gas with GHG profiles similar to RNG (called TNG). If you are interested in helping create this new market dynamic contact [Sherrie Merrow](#) of the Colorado Natural Gas Vehicle Coalition.



Ford Model Year 2020 Natural Gas & Propane Vehicle Availability Announced

Ford Motor Company offers the largest selection of light and medium-duty CNG and LPG vehicles, among all automakers today. Model Year 2020 (MY2020) is no different with availability for F-150, Super Duty trucks, vans, and chassis-based models. These Ford vehicles are produced in Ford factories and then the CNG or LPG fuel system is developed and added by Ford certified Quality Vehicle Modifiers (QVMs) prior to delivery of each vehicle to Ford dealerships. Redmark is proud to be the Ford QVM in the Colorado Region and installs various Ford QVM developer systems.

As fleets that buy Ford CNG and LPG vehicles know, these AFVs are typically available in Q1-Q3 each year following notice by Ford in August or September regarding which models and engine platforms will be available for the Ford QVM program. The Ford QVM developers then calibrate the fuel systems and certify them for emissions compliance at the US EPA and/or CARB. This process occurs in the August to December timeline so that the CNG and LPG vehicles can be upfit at Ford QVM installer facilities starting in early Q1 and delivered to Ford dealerships.



For MY2020, the Ford QVM availability for CNG and LPG vehicles is expected to be as follows:

- Transit Connect van is available with the 2.5L engine. We are waiting for a QVM developer to announce a fuel system for the 2.5L engine available with this vehicle.
- Transit van is pending as a QVM offering. Already, one QVM developer has certified a CNG fuel system for this platform at US EPA. We are pressing Ford for this platform with the 3.5L engine for late availability.
- F-150 truck is available with the 5.0L engine. We have multiple QVM developer fuel systems available for various configurations of this vehicle/engine platform.
- Super Duty trucks (F-250, F-350, F-450) are available with the 6.2L engine. We have at least one QVM developer fuel system available. This platform is scheduled for late availability from Ford (early Spring 2020 for ordering and production).
- Medium-duty truck chassis (in various sizes and configurations) are available with the 6.2L engine. We have at least one QVM developer fuel system available.
- Note that Ford has released an all new 7.3L V-8 gas engine to replace the retiring Ford 6.8L V-10 gas engine. The Ford 7.3L engine puts out 430 HP and 475 ft-lb of torque. Coupled with the all new 10-speed transmission, the 7.3L is a great option on CNG. The engine is available as an option for MY2020 F-250 and 350 Super duty pickup trucks. The 7.3L engine is standard in all MY2020-MY2021 F-550, F600, F650 and F750 medium duty trucks, E-series vans, and F-53 and F59 stripped chassis. These CNG systems are only available as dedicated CNG platforms.

We are being told by Ford that as of now they expect normal ordering deadlines for the above mentioned vehicles for MY2020. Let us know your questions about sourcing MY2020 Ford QVM vehicles with CNG or LPG fuel systems. We can also point you toward Ford dealerships in the Colorado Region that have knowledgeable commercial AFV sales, service and support staff.



- News Brief -



The National Highway Traffic Safety Administration (NHTSA) has proposed an update to its heavy-duty NGV fuel system tank inspection and labeling requirement. NHTSA is proposing to amend this visual inspection and labeling requirement in Federal Motor Vehicle Safety Standard No. 304 “Compressed natural gas fuel container integrity,” to state that CNG fuel containers for heavy-duty vehicles “should be inspected at least once every 12 months,” according to a notice of proposed rulemaking ([NPRM](#)).

The June 21 NPRM states, “NHTSA has tentatively concluded multiple visual inspections per year based solely on mileage would not improve vehicle safety for these high-mileage CNG heavy vehicles and could potentially reduce safety. Because the current periodic visual inspection interval is intended for light vehicles and is consistent with the operation of these vehicles, no change is proposed to the periodic visual inspection interval for CNG fuel containers on light vehicles.”

“This announcement from NHTSA complements the updated, four-tiered inspection and review process NGVAmerica developed with comprehensive industry support and input from the American Trucking Associations,” explains NGVAmerica’s president, Daniel Gage. “Per industry recommended practices, full, detailed inspections should be performed annually or whenever cursory reviews uncover signs that a more detailed inspection is needed. Furthermore, recommended reviews and inspections are expanded to cover the entire fuel system and not just the CNG storage system.”

In December 2017, NGVA released this four-tier program in its [CNG Fuel System Inspection Guidance document](#). This guidance breaks down recommended CNG fuel system inspection into four tiers, as follows:

1. **Pre-Service Visual Inspection.** This is a detailed inspection of the complete CNG fuel system prior to the vehicle being placed into service. This inspection is to verify that the system meets specifications and applicable codes/standards.
2. **Cursory Visual Inspection.** This inspection should be done every pre- and post-trip by the driver. During this inspection, the driver is checking

that there is no damage to the exterior of the fuel system, including the fill receptacle, and that vent lines are capped.

3. **General Visual Inspection.** This should be conducted at preventative maintenance events by a trained technician. During this inspection, the technician is inspecting the shields and enclosures of the CNG fuel system, along with any readily accessible CNG fuel system components.
4. **Detailed Visual Inspection.** The final level of inspection is intended to be a thorough inspection of the entire CNG fuel system. This level of inspection will likely require the removal of shielding and/or the use of mirrors and cameras to visually access all components.

Redmark is a CSA certified tank inspector and can provide the NHTSA tank and fuel system required inspections. We can also perform or provide training to your fleet team (as applicable) for the four tiers of suggested inspections. Please [contact Redmark](#) to learn more.



- Commercial Offerings -



Calendar year 2019 marked a transition for Redmark as the company has begun adding new products and services beyond its core CNG and LPG new vehicle upfits (including Ford QVM program), private CNG fueling station repair and maintenance, technician and fueling training, and CSA fuel tank inspections.

-
- The first new offering is a comprehensive truck upfit service that is coupled with CNG or LPG new vehicle fuel system installations. This helps simplify the upfit logistics and reduces cost for fleets for items such as light bars, radios, tool boxes, headache racks, grill protection, bed liners and other accessories. Redmark also offers fuel off-load systems so that the CNG vehicle fuel tanks can refuel other vehicles or support natural gas utility operations for pipeline or meter repairs without losing natural gas supply to end-customers.
-

- Started in 2018 and continuing into 2019 and beyond, Redmark offers full disassembly, testing and reassembly of CNG semi-truck trailers for use in virtual pipelines, natural gas pipeline support, gas field power, and other applications. This work includes valve testing and replacement, pressure vessel recertification or testing (as appropriate), and related work.
-

- As a reminder to fleets, CNG tank inspections are required every 3 years or 36K miles for light-duty vehicles and every 12 months for heavy-duty vehicles to support safe operation. These inspections are required for all vehicles that have a CNG tank installed, whether they are operated on CNG or not. [Contact Redmark](#) to setup a time to have your fleet vehicles inspected (bulk purchase discounts available for large numbers of vehicles).
-

- In 2020, Redmark will be making announcements about some new CNG fueling technologies, novel components for CNG medium and heavy-duty trucks, and new alternative fuel vehicle related products/services. Stay tuned.
-
-



JANUARY						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

**Anaerobic Digestion Process Fundamentals
Management Shortcourse**

-

Renewable Gas 360 (Rethink Methane)

FEBRUARY						
Sun	Mon	Tue	Wed	Thur	Fri	Sat

						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

Energy Independence Summit 2020

MARCH						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

--	--	--	--	--	--	--

The Work Truck Show®

-

California Dairy Sustainability Summit

APRIL						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

NAFA's Institute & Expo 2020

-

Green Transportation Summit & Expo (GTSE)

-

RNG SUMMIT 2020

MAY						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

ACT Expo 2020

(Advanced Clean Transportation Expo)

REDMARK SERVICES SECTION

FORWARD TO A FRIEND

Vehicle Services

Ford QVM Vehicles | CNG/LPG Installations | Repair and Maintenance | CSA Tank and Vehicle Inspections

Fueling Station Services

O&M Contracts | 24/7 Support | Remote Monitoring and Analytics | New Builds/Upgrades

Specialty Support

Parts Supply | Training | Roadside and Backup Fueling

Contact us at: 303-287-6336 | marketing@redmarkcng.com

Copyright © 2019 Redmark CNG Services, All rights reserved.

Want to change how you receive these emails?

You can [update your preferences](#) or [unsubscribe from this list](#)

