

# In Partnerships We Trust.

From new services to exciting partnerships, this will be a year of expanded products and services for fleets from Redmark. We are announcing electric hybrid vehicle upfits for Ford and GM platforms, electric charging station services, and modular/mobile CNG fueling solutions. Our <a href="new website">new website</a> is now up and branded: Redmark, Advanced Fuel Vehicles & Services. This edition of E-news also includes our natural gas, propane and electric hybrid industry news brief section and events calendar.

- Featured Stories -





#### Redmark Launches Electric Hybrid Upfits & Services

We are excited to announce that Redmark now offers electric hybrid upfits for fleet vehicles, as well as <u>vehicle services</u> and <u>EV charging system installations</u>. We are partnering with XL Fleet, the leading developer of fleet electrification technology, to offer advanced hybrid electric drive systems to fleets in the Rocky Mountain Region and elsewhere starting with MY2021 new OEM vehicles.

#### New Electric Hybrid Upfits - Made to Work for You

With an HEV/PHEV upfit, you can choose from a long list of OEM platforms, including light-duty and medium-duty trucks and vans from Ford and GM. As an XL Fleet Sales & Installation Partner, we install the HEV (hybrid electric vehicle) and PHEV (plug-in hybrid electric vehicle) drive systems, which integrate seamlessly with the OEM powertrain.

- XL hybrid electric drive systems can cut fuel costs and emissions by up to 25% without affecting vehicle performance.
- XL systems work with many of the most popular gasoline fleet vehicles on the market. Vehicle operation is simple and minimal training is required.
- Each XL Fleet hybrid electric system includes XL Link telematics to optimize vehicle charging and operations.

Redmark receives the base OEM vehicle directly from the factory, installs the XL system, and each vehicle upfit is performed in accordance with an OEM prescribed quality management system (QMS) process. Redmark must pass an annual inspection and review of its QMS and installation processes to continue offering HEV/PHEV upfits (much like its CNG and LPG vehicle installations for the Ford QVM program). We can also customize each fleet vehicle beyond the basic factory-direct options, so it fits with the intended application. Your new vehicles arrive fully warrantied and supported, with all factory OEM warranties intact. Redmark and its suppliers maintain the warranties for all electric drive system parts and installation workmanship.



#### Redmark is an OEM Certified Upfitter

As part of our expansion into electric hybrid upfits, Redmark is now one of the first vehicle upfitters in the United States to receive Ford's eQVM installer certificate. Redmark now holds both the Ford eQVM and traditional QVM (for CNG and LPG) certificates, a rare double-play.

#### **EVs Made Easy**

We know that as our fleet customers expand into hybrid electric vehicles, they need to find the right balance between sustainability, affordability, operational specs, and vehicle performance. With the XL Fleet HEV/PHEV system upfits, our customers will have the benefits of an electric drive system while keeping the base vehicle fuel system in-place. Now you can electrify your fleet with a company you know and trust and the leading HEV/PHEV systems.

View the XL Fleet product specifications brochures on our website

Find Redmark on Ford's list of vehicle upfitters here



#### **EV Charging Stations for Fleets**

The number of hybrid electric fleet vehicles on the road is steadily increasing, and more fleets are deciding to invest in their own charging stations. To help its customers choose great charging solutions, Redmark is partnering with ChargePoint, the leading EV charging systems manufacturer and network operator (with 115,000 places to charge globally and drivers plugging in approximately every two seconds), to offer design, build, and maintenance services for EV fleet charging stations. To assist fleets with starting the planning process for on-site EV charging systems, here are a few essential tips:



#### 1. Determining power requirements

The first step is to analyze what time of day the plug-in electric vehicles are available to charge and how many hours each vehicle is available for charging (the charging window). The second step is to consider the portion of battery capacity (in terms of kWh) for each vehicle that needs to be charged on average each day. The power needed on an hourly basis during a daily charging window is called the *load profile*.

If all the vehicles are available to charge from 6 PM to 4 AM, for example, the load profile will be the energy required to fully charge every vehicle over 10 hours. Assuming 30 vehicles each with 20 kWh of battery capacity that needs to be charged, then 600 kW of power is needed for the system and 2 kW per vehicle. Most Level 2 systems deliver a charging rate of 5+ kW, which would be sufficient for this example. If daytime top-off charging is needed then the load profile needs to be further evaluated.



#### Choosing the best charging solution

Once a fleet has analyzed its likely load profile, the next step is to choose the hardware that will be the best fit. There are 3 levels of EV charging, with Levels 2 and 3 being most common for fleets.

#### Level 1

120-volt charging: normally used as back-up since the charging rate is very slow.

Level 2

240-volt charging: can deliver 5-10 kW, which for a 20 kWh battery takes 2-4 hours and can deliver about 100 miles of range for a light-duty EV.

• Level 3

**DC Fast Charging** utilizes direct current to deliver up to 50 kW of power, which can equate to over 200 miles of range for 30-60 minutes of charge.



#### **Optimizing energy costs**

There are several ways fleets can lower costs for EV charging. Installation costs can be offset with grants and other financial incentives, and vehicle operating costs are typically reduced for EVs compared with gasoline vehicles. Fleets can also optimize charging costs by managing vehicle charging behavior, such as:

- Taking advantage of time-of-use energy prices from the local utility can result in much lower rates.
- Utilizing analytics and software for power management and monitoring vehicle operation.

Visit <u>Redmark's website</u> to learn more about our offerings with ChargePoint, or ask us how you can build an electric charging station for your fleet by sending us a <u>message</u>.



# Onboard Dynamics Offers Innovative, Cost-effective Modular CNG Fueling Solutions for Natural Gas Vehicles & Utility Services

The team at Redmark has been passionate about natural gas for over 30 years, and we are inspired to see this industry still growing and changing as it embraces innovation and moves towards greater sustainability. That's why we are excited to feature our new relationship as a channel partner with <u>Onboard Dynamics</u>. The Onboard Dynamics GoFlo® CNG80 compressor gives fleet managers a modular, affordable, and scalable solution for compressing natural gas for fuel without the need for electrical power. The company's companion product, the GoFill™ refueler, is a stand-alone trailer that connects to the

GoFlo unit, creating a complete refueling station that is modular (multiple units scale the capacity) and mobile.



#### System benefits:

- No electricity required (completely natural gas-driven system)
- Cost-effective to operate compared with traditional smaller-scale CNG fueling systems
- Lower installation costs does not require site upgrades or electrical infrastructure
- Mobile or permanent (skid mounted with integrated trailer chassis)
- Scalable great starter kit to begin or expand a CNG vehicle fleet (each GoFlo® CNG80 system compresses up to 40 GGE per hour, depending on inlet pressure)
- Easy to redeploy can be quickly moved and set-up at another location
- Can be used to collect renewable natural gas from sources like landfills and farms
- Fueling CNG trailers for use by utility maintenance operations

Go to our <u>website</u> to find product specs for the GoFlo® and GoFill™ and learn more about our partnership with Onboard Dynamics. Or give us a call for a quote at (303) 287-6336.



#### New Product!

Inquire about the GoVAC™ unit designed for wellhead, pipeline and utility operations and maintenance.





#### **Resource alert!**



Interested in LPG? Two fleets share their transit bus success stories in this <u>recent webinar</u> from the <u>Propane Education & Research Council.</u>



Check out the PERC Webinar here!



# Spradley Barr Greeley Receives Awards for Advanced Fuel Vehicles

Winter has rolled around again, which means it's that important time of year for

government fleets in Colorado to order new vehicles. Colorado's <u>State Fleet Management</u> agency (SFM) has awarded statewide bids for new vehicle procurement, and any state agency, city, or municipality that needs to purchase a new fleet vehicle can use SFM's list of awards to find the most affordable option.

<u>Spradley Barr Greeley</u>, one of Redmark's partner Ford dealerships, was awarded the statewide bid for most of the model year 2021 advanced fuel vehicles. Their winning bid includes 38 Ford vehicle models, ranging from CNG bi-fuel and CNG dedicated models, to HEVs and PHEVs, among others. Spradley Barr Greeley also won the bid for alternative fuel vehicles for Colorado's Weld and Arapahoe counties.

To learn more about these and other new fleet vehicles available from SBG, visit their work trucks web page <a href="here">here</a>. To find more information and resources from SFM, visit their website <a href="here">here</a>.



## **Next RAQC Grant Funding Round Opening Soon**

The <u>Regional Air Quality Council (RAQC)</u> is expected to open their next round of funding for grants to purchase alternative fuel vehicles through the <u>ALT Fuels Colorado program</u> in the spring or early summer. Funding is expected to be available for the replacement of pre-2009 vehicles with more sustainable full-electric (battery electric or hydrogen fuel cell electric) or renewable natural gas (RNG) vehicles. Applications for hybrids of these technologies are also eligible. Eligible vehicles include:

- Class 8 Local Freight Trucks (Heavy-Duty) Greater than 33,000 lbs
- Class 4-7 Local Freight Trucks (Medium-Duty) Between 14,001 and 33,000 lbs
- Class 4-8 School & Intra-facility Shuttle Buses Between 14,001 and 33,000 lbs

Funds are available to all public, private, and non-profit fleets statewide within Colorado. Additional funding may be available for associated electric charging stations. More information and application instructions can be found on the Clean Air Fleets website or by contacting Matt Goble at <a href="majoble@ragc.org">mgoble@ragc.org</a>.

# **NGVAMERICA**

## Natural Gas Vehicles for America

#### **Revised Cold Weather Guidelines for NGVs**

As temperatures drop, the trade association <u>Natural Gas Vehicles for America (NGVA)</u> has issued a list of best practices for operating natural gas engines in cold weather. Their best practices are adapted from the Cummins Natural Gas Tech Talk in September 2020. Read the full list <u>here</u>. Explore NGVA's resources page <u>here</u>.

#### Tips for operating engines in cold weather



Do not use cold starting aids with NGVs. Testing natural gas engines in extremely cold weather has shown spark-ignited natural gas engines have better starting performance compared to equivalent diesel engines that rely on cold starting aids.



Other cold-weather accessories such as heaters for the fuel tank and fuel filter may have their place with diesel vehicles, but fuel system heaters are not recommended or necessary with NGVs.



Allow the engine to warm up. For better performance and to eliminate the chance of fuel system components freezing, start and allow the engine to idle at low RPM for 5 minutes. This idle time may not allow enough time to heat the cab, but it is enough time to warm the engine's major components, including fuel regulators and various sensors.



# New NGVA Report on Renewable Natural Gas to "Fuel a Greener Future"

This month, NGVA released a new report pushing for investment in renewable natural gas (RNG) as a transportation fuel, calling it "the most cost-effective and immediate climate positive change policymakers can affect." The report covers the many benefits of recycling methane emissions as RNG, including RNG's wide availability, affordability, and potential as a carbon-negative fuel.

The 6-page report, titled "Fuel a Greener Future: Achieve Carbon Negative Transportation Today," can be downloaded <a href="here">here</a> or you can browse NGVA's online resource center <a href="here">here</a>.



# - Commercial Offerings -

# A Message from:





X3CNG is a leading CNG fueling station operator in the Rocky Mountain Region. X3CNG has the largest network of public-access CNG fueling stations in Colorado and offers multiple solutions to fleets that help them reduce their carbon footprint, lower criteria emissions like NOx that contribute to ozone pollution and improve fleet operation economics.

All of their locations offer renewable natural gas (RNG), which helps fleets participate in grant programs, <u>Colorado's GHG roadmap</u>, and the upcoming Clean Truck Strategy program. X3CNG and Redmark often partner to bring solutions to fleet customers such as <u>roadside emergency vehicle fueling</u> and other support services.

If you are interested in learning about RNG or how your fleet can qualify for vehicle incentives by replacing CNG with RNG, please contact James Mora at <a href="mailto:james.mora@x3cng.com">james.mora@x3cng.com</a>.

Interested in sponsoring a message from your organization in our newsletter?

Contact info@redmark.com for details.

# - Redmark Calendar -



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			

#### March 5

Colorado Motor Carriers Association 2020-21
Safety Awards Nomination: Deadline

March 8-12
NTEA Work Truck Show - Virtual Work Truck Week

## March 16

<u>Diesel Emissions Reduction Act (DERA)</u> <u>National Grants Program Application Deadline</u>

APRIL							
Sun	Mon	Tue	Wed	Thur	Fri	Sat	
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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		

April 1-May 31

<u>CDOT Volkswagen Settlement Program</u>

<u>(Transit Bus Replacement Grant Window)</u>

MAY							
Sun	Mon	Tue	Wed	Thur	Fri	Sat	
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30 31

May 11-12

The Coalition for Renewable Natural Gas (RNG Summit 2021)

April 1 - May 31

<u>CDOT Volkswagen Settlement Program</u> (<u>Transit Bus Replacement Grant Window</u>)

JUNE						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
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25	26	27	28	29	30	31

June 14-16
Forth Roadmap Conference

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	1			
29	<i>30</i>	31	1	2	3	4

# August 16-18 <u>Green Transportation Summit & Expo 2021</u> (GTSE)

August 30 - September 1

NAFA Institute & Expo 2021

August 30 - September 2

<u>Advanced Clean Transportation (ACT) Expo</u>

GASEOUS VEHICLE UPFITS

ELECTRIC HYBRID UPFITS

NATIONAL PARTS SUPPLY

### CNG & LPG FUELING

## MODULAR FUELING

EV CHARGING

## FORWARD TO A FRIEND

#### **Fleet Vehicle Services**

Ford QVM & eQVM Vehicles | CNG/LPG Upfits | HEV/PHEV Upfits Repair & Maintenance | CSA Tank & Vehicle Inspections

#### **Fueling & Charging Station Services**

CNG & LPG Station Services, Upgrades & New Builds | Electric Charging Systems Modular/Mobile Fueling | Fuel for Work Partnership

#### **Specialty Support**

National Parts Supply | Roadside & Backup Fueling & Charging | Training CNG Trailer Maintenance & Repair | Truck Accessories

#### Redmark, Advanced Fuel Vehicles & Services

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