

SHOWTIMES

MAY 3, 2017 ACT EXPO

SHOWTIMESDAILY.COM

Agility Tackles Propane

Natural gas fuel systems leader adds propane unit. —Page 4

Kenworth Cleans the Ports

CNG and hydrogen figure in plans for far cleaner drayage. —Page 8

Ford Pursues the Electric Vehicle

Hybrid cop car as OEM promises 13 electrified vehicles. —Page 11

Lightning & XL Hybrids for Ford

Automaker sets a new upfitter category: the eQVM. —Page 11

Bauer Keeps It Quiet

Compressor supplier introduces remote control too. —Page 12

Roush Touts Medium Duty

Successful in buses, Roush promotes propane autogas for trucks, too. —Page 12

ChargePoint Flies High

Partners with Uber on flying cars as Apollo gets GSA nod. —Page 15

RNG: What's the Fuss?

New Clean Energy Renewables boss explains. —Page 16

Xebec's Better PSA for RNG

Efficient process is said to make biomethane practical. —Page 17

HHP Summit in Florida

The dates are set: **November 6-9** in Jacksonville. —Page 18


ACT EXPO
April 30th – May 3rd 2018

News Coverage Powered by

FLEETS & FUELS
FLEETSANDFUELS.COM



US FuelCell JV Details and More Hydrogen Trucking News on Pages 3-8

US Hybrid president and CEO Abas Goodarzi and Jiangsu Dewei Advanced Materials unveiled a hydrogen-fueled Class 8 fuel cell truck with a US Hybrid fuel cell here yesterday – and announced the US FuelCell, Inc. joint venture to commercialize the fuel cells at a factory in Connecticut. “Dewei is committed to the successful development of fuel cell technology for commercial buses and trucks,” said Dewei chairman Zhou Jianming.

Workhorse to Ride with Ryder as W-15 Is Revealed



Ryder Systems said today that it will be the strategic service provider and distributor for Workhorse, which with multiple triple-digit orders from UPS has emerged as a driving force in electric drive delivery vehicles. And, as promised, Workhorse unveiled its half-ton PHEV pickup, the W-15, here late yesterday. —See Page 14

NGV America Is Seeking New Leadership

The NGV America executive committee is meeting here this morning following last week's announcement by Matt Godlewski that he is stepping down as association president. AGA/ American Gas Association policy VP Kathryn Clay is to be named interim

executive director. An early task: name a new permanent chief – and a new NGV America chair.

Also expected to participate in today's meeting are Cummins Westport president Rob Neitzke, Agility Fuel Solutions president and CEO Bill Nowicke, and Waste Management corporate fleet director Marty Tuft.

Godlewski is taking a “senior role” with the Ford government affairs team in Michigan. “Leading NGV America has been a rewarding experience and a significant part of my career,” he said in a memo this past Thursday. He'll wrap up there sometime this month.



Former (and acting NGV America) chair Ron Eickelman with interim executive director Kathryn Clay here yesterday.

Simplifying Sustainability

Visit Us at Booth #1011


A Loves Company



ELIMINATE RANGE ANXIETY
MAXIMIZE UPTIME
CONNECT TO YOUR DATA

Developed with Cummins, Blue iQ™ integrates data from your fuel system and engine to give you a next-level fleet experience.

AGILITY CAN SHOW YOU HOW ACT EXPO BOOTH 945

US Hybrid Fuel Cell Joint Venture with Jiangsu Dewei

US Hybrid is helping take the hydrogen fuel cell into the Class 8 vehicle category, unveiling here yesterday a Navistar International ProStar day cab fitted with an 80-kilowatt (107 horsepower) FCeTM80 fuel cell engine – and announcing a joint venture with Jiangsu Dewei Advanced Materials.

The truck is to be operated by TTSI/Total Transportation Solutions, Inc. as one of two demonstration tractors scheduled for delivery at the Ports of Los Angeles and Long Beach.

“TTSI is excited to lead the demonstration of zero-emission fuel cell technology for port

drayage in the San Pedro Ports,” said Vic LaRosa, TTSI CEO and president.

The US Hybrid fuel cell in the 80,000-pound GVW truck makes electricity for a 500-horsepower traction motor with 2,900 foot pounds of direct drive torque (3,750 Nm). Estimated driving range is 200 miles under normal drayage operation. The vehicle can be fully fueled in less than nine minutes.

“Demonstrating the viability of zero-emission trucks for goods movement is a vital step toward Southern California meeting its federally mandated standards for healthy air,” said Wayne Nastri, executive officer of the South Coast Air Quality Management District.

“These new fuel cell trucks will help protect the health of disproportionately impacted communities near our ports, rail yards, warehouses, and freight transportation corridors,” said Coalition for Clean Air president and CEO Joseph Lyou.

US Hybrid said too here that it “is well positioned to be a major U.S. manufacturer of fuel cell engines for the medium- and heavy-duty commercial transportation sector.” Via the pact with Dewei, the firm plans to expand its production facility in Connecticut.

In addition to the FCeTM80, the US FuelCell,

Inc. joint venture will focus on the production of US Hybrid’s 40-kilowatt FCeTM40PEM/proton exchange membrane fuel cell engine for Class 6 and Class 7 trucks, and medium-duty transit buses.

“Dewei is committed to the successful development of fuel cell technology for commercial buses and trucks, as evidenced by our \$42.8 million (RMB 300 million) investment in Chinese fuel cell production and establishment of a \$428 million (RMB 3000 million) industrial fund,” said Dewei chairman Zhou Jianming.

“This new partnership with US Hybrid will enable US FuelCell to meet market demand cost-competitively in China, North America, and Europe.”

“Our joint venture with Dewei will dramatically increase the availability of PEM fuel cell engines for commercial vehicles globally,” said US Hybrid president and CEO Abas Goodarzi, a 35-year veteran of the electric, hybrid, and fuel cell industries.

“Given that heavy-duty engines are the leading source of smog-forming emissions in many metropolitan areas throughout the world, we are thrilled to provide an economically viable zero-tailpipe-emission solution to help cities achieve their air quality improvement and climate change mitigation goals.”



US Hybrid product manager Dan Orlowski with the FCeTM80 fuel cell engine on the Navistar International ProStar day cab at Booth 1803.

SHOWTIMES

Publisher

Kirk Fetzer

415-385-0987; Kirk@CTNPublishing.com

Editor

Rich Piellisch

415-305-9050; Piellisch@FleetsandFuels.com

Writer

Scott Gourley

Copy Editor

Gail Gourley

Production Artist

Ariel Fristoe

Advertising Manager

Nancy O'Brien

Advertising Manager

Brian O'Brien

News Coverage by Fleets & Fuels

www.fleetsandfuels.com

FLEETS & FUELS

Printed by:

Pacific West Litho, Anaheim, CA

ShowTimes is published live

at the ACT Expo 2017

by Convention & Trade Show News.

Advertising Department: (415) 979-1414

Editorial Department: (415) 896-5988

www.ShowTimesDaily.com

© Copyright 2017 by Convention & Trade Show News.

All rights reserved. Material in this publication may not be reproduced in any form without permission.



CONVENTION & TRADE SHOW NEWS

AFVs for First Response Tomorrow

Alternative fuels for emergency vehicles? It's happening and the issues raised will be explored at a *First Response Operations* workshop tomorrow morning from **9:00am-10:15am** in **Room 102C**.

The *First Response* workshop will be moderated by Bill Davis, director of NAFTC, the National Alternative Fuels Training Consortium.

The scheduled speakers include

- Andrea Pratt, green fleet & fuel program manager, City of Seattle: *Leading Adoption of AFVs for First Responder Applications*;
- Dan Bowerson, director of technology & development, NGV America: *Natural Gas Vehicles in First Responder Operations*;
- Linda Bluestein, National Clean Cities co-director, U.S. Department of Energy: *AFVs for Resilience and Emergencies: A Project Overview*; and
- Michael Taylor, director of autogas business



development with PERC, the Propane Education & Research Council: *Choosing Propane Vehicles in Emergency Situations*.

Also being presented Thursday by NAFTC is *The Total AFV Training Requirement* workshop from **10:30am-11:45am** in **Room 103A**.

NAFTC is at **Booth 1718**.

Agility Fuel Solutions Tackles Propane

Executives Explain Rational for New Powertrain Systems Unit

Agility Fuel Solutions is at ACT Expo 2017 as a revamped company, having merged last year with the automotive operation of Type IV CNG cylinder manufacturer Hexagon Lincoln. Now it's making another big move, establishing a new Powertrain Systems unit to help supply equipment for propane autogas vehicles.

"It's been a year of growth and change," says Agility CEO Kathleen Ligoeki. "We celebrated a year in operation at our vertically-integrated fuel systems plant in North Carolina, we are leveraging our successful partnerships with McNeilus and Cummins including the recent launch of Blue iQ, and we've been strengthening our commercial and customer care organizations to better support our customers."

"Agility is dedicated to providing clean fuel solutions to OEMs and fleets," she says. "While we've focused primarily on heavy-duty vehicles in recent years, many of our heavy-duty fleet customers also operate medium-duty vehicles..."

"To make it easier for those fleets and communities to move toward clean fuel solutions,

we wanted to extend our offerings to include tailored solutions for the medium-duty market."

That meant propane.

"Propane as an alternative fuel fits these applications well with good economic payback," Ligoeki says, noting that "medium duty systems are more integrated with engines and require additional skillsets, so we needed to expand our team to focus on this segment."

Enter Brad Garner, with propane experience dating from the 1980s, including helping develop the first liquid-injection propane systems, and a stint as COO with Impco (now a unit of Westport Fuel Solutions).

"There's a need for a one-stop shop," Garner says, including propane powertrain systems. "Agility shared that vision, and we all recognized the advantages of building a powertrain systems



Agility's Kathleen Ligoeki and Brad Garner

capability on the stout platform that Agility has with its financial strength, geographic reach, and ability to provide a single point of contact with OEMs from platform development through the sales cycle including

after sales support, training, and service parts.

"In the Powertrain Systems business unit," Garner says, "we'll be focused on developing and certifying complete fuel systems for various applications. Additionally, we'll provide Manufacturer of Record support services, and depending on the particular application, and the capabilities of outside partners, we may also provide assembly of fuel systems on engines, and sell complete certified engines."

Agility Fuel Solutions is at [Booth 945](#).

UPS Plans Hydrogen-Fueled Fleet

UPS is showing a first-ever hydrogen fuel-cell powered zero-emission Class 6 delivery vehicle at [Booth 1745](#) – a converted 2006 package car with fuel cell by Hydrogenics, a highly efficient switch-reluctance motor by Nidec, and high-pressure fuel cylinders by Luxfer ([Booth 837](#)).

The FCEV/fuel cell electric vehicle prototype is to be deployed in Sacramento, where UPS "will validate its design and core performance requirements by testing it on the street starting the third quarter of 2017."

If all goes well, as many as 16

more could be built, says UPS fleet maintenance and engineering director Mike Britt.

Current project plans call for additional UPS trucks to be validated with at least 5,000 hours of in-service operational performance. "All of the trucks will be deployed in California due to that state's ongoing investment in zero tailpipe emission transportation and installment of hydrogen fueling stations around the state," UPS says.

"The challenge we face with fuel cell technology is to ensure the design can meet the unique operational demands of our delivery vehicles on a commercial scale," said Mark Wallace, UPS senior VP of global engineering and sustainability.

"This project is an essential step," he said, "to test the zero tailpipe emission technology and vehicle on the road for UPS and the transportation industry."

"We have a long history of developing and promoting the use

of more sustainable alternative fuels with our Rolling Laboratory, and hope that by bringing our unique expertise to the development of hydrogen fuels, we can help advance the technology."

Program overseer CTE, the Center for Transportation and the Environment, notes that the Class 6 truck project is part of a fuel cell project grant awarded by DOE in 2013 focused on verifying the proof of concept in commercial delivery vehicles.

UPS elected to use an old chassis, formerly powered by an International Harvester TD 345 diesel, to keep costs down.

"We think we're going to get 20 more years out of this chassis with this propulsion system," Mike Britt told *ShowTimes*.

In addition to CTE, UPS is partnered with the Center for Transportation and the Environment as well as the University of Texas' Center for Electromechanics.

Long Island-based Unique Electric Solutions is working on vehicle integration.



Note Hydrogenics fuel cell and twin fuel cylinders Luxfer ([Booth 837](#)) on UPS Class 6 chassis at [Booth 1745](#).

VISIT US AT
**BOOTH
#1011**

TRILLIUM CNG YOUR CNG SOLUTION PROVIDER



NO MATTER WHAT SECTOR YOU'RE WORKING IN, TRILLIUM CNG
AND LOVE'S HAVE YOU COVERED.



www.TrilliumCNG.com
www.Loves.com/CNG

A  **Loves** Company

Toyota Furthers Hydrogen Trucking

Outfits a Kenworth T660 Tractor with Twin Mirai Fuel Cells

Seeking to show that hydrogen power can play a role beyond the passenger car, Toyota last month kicked off "Project Portal," by which a modified Kenworth T660 will take part in a feasibility study examining the potential of fuel cell technology in heavy duty applications.

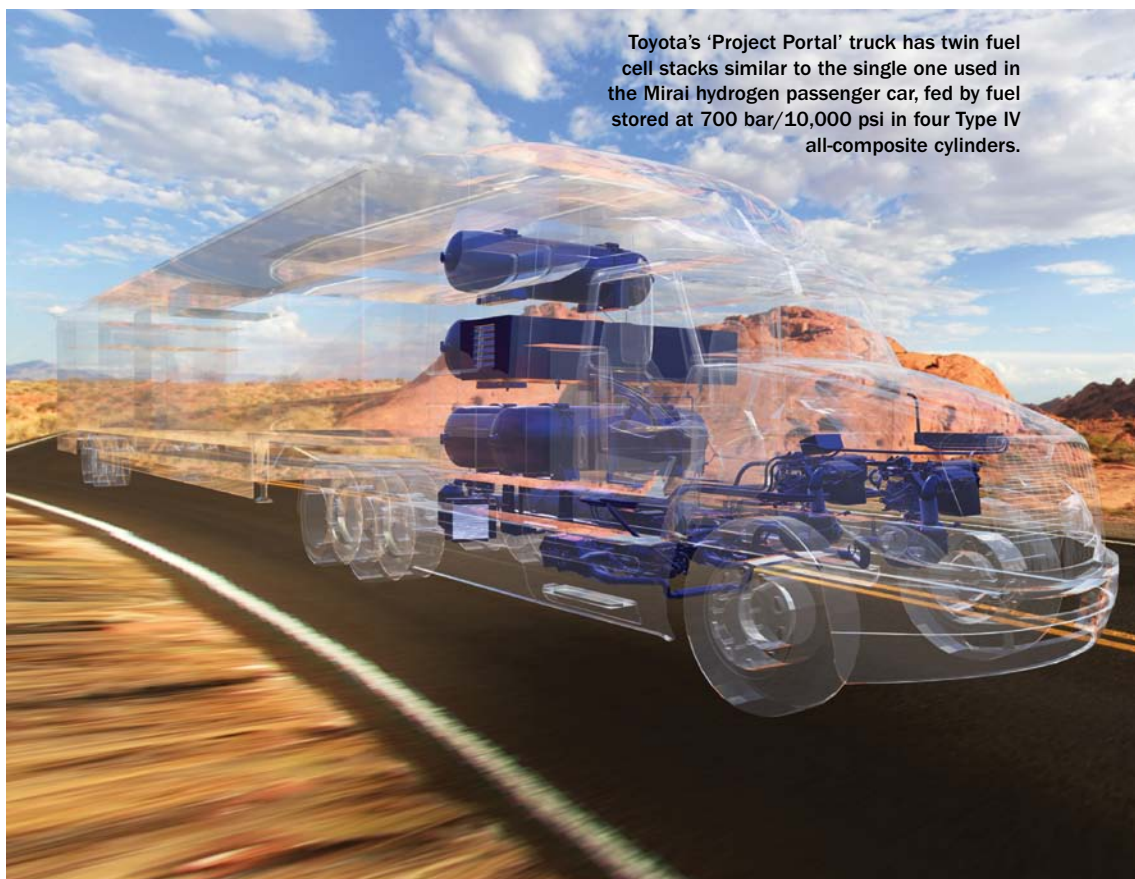
Operators partners are being selected for the study that's to begin this summer at the Port of Los Angeles, Toyota (Booth 1408) says.

The test vehicle is a Kenworth T660, purchased as a glider and fitted with a Toyota fuel cell system. The truck has two fuel cell stacks similar to the single one used in the Mirai hydrogen passenger car, fed by fuel stored at 700 bar/10,000 psi in four Type IV all-composite cylinders.

The Project Portal vehicle is designed to support port drayage operations. The Toyota hydrogen drive generates more than 670 horsepower, the company says, with 1,325 foot pounds of torque. The driveline includes a 12-kilowatt-hour battery, which is "a relatively small battery to support Class 8 load operations."

Gross combined weight capacity is 80,000 pounds with an estimated driving range of more than 200 miles per fill under normal drayage operation. "It is a fully functioning heavy duty truck with the power and torque capacity to conduct port drayage operations while emitting nothing but water vapor," Toyota says.

"As they did with the Prius and the Mirai, Toyota is taking a leap into the future of technology," CARB/California Air Resources Board chair Mary D. Nichols says in a Toyota release. "By bringing this heavy duty, zero emission hydrogen fuel cell proof of concept truck to



Toyota's 'Project Portal' truck has twin fuel cell stacks similar to the single one used in the Mirai hydrogen passenger car, fed by fuel stored at 700 bar/10,000 psi in four Type IV all-composite cylinders.

the Port, Toyota has planted a flag that we hope many others will follow," she said.

"CARB will be following the progress of this feasibility study with interest, as we look to develop the best mix of regulations and incentives to rapidly expand the market for the cleanest, most efficient big trucks to meet the need for dramatic change in the freight sector," Nichols said.

"Toyota believes that hydrogen fuel cell technology has tremendous potential to become

the powertrain of the future," Toyota Motor Sales North America executive VP Bob Carter says in the Project Portal announcement.

"From creating one of the world's first mass market fuel cell vehicles, to introducing fuel cell buses in Japan, Toyota is a leader in expanding the use of versatile and scalable zero-emission technology," he said.

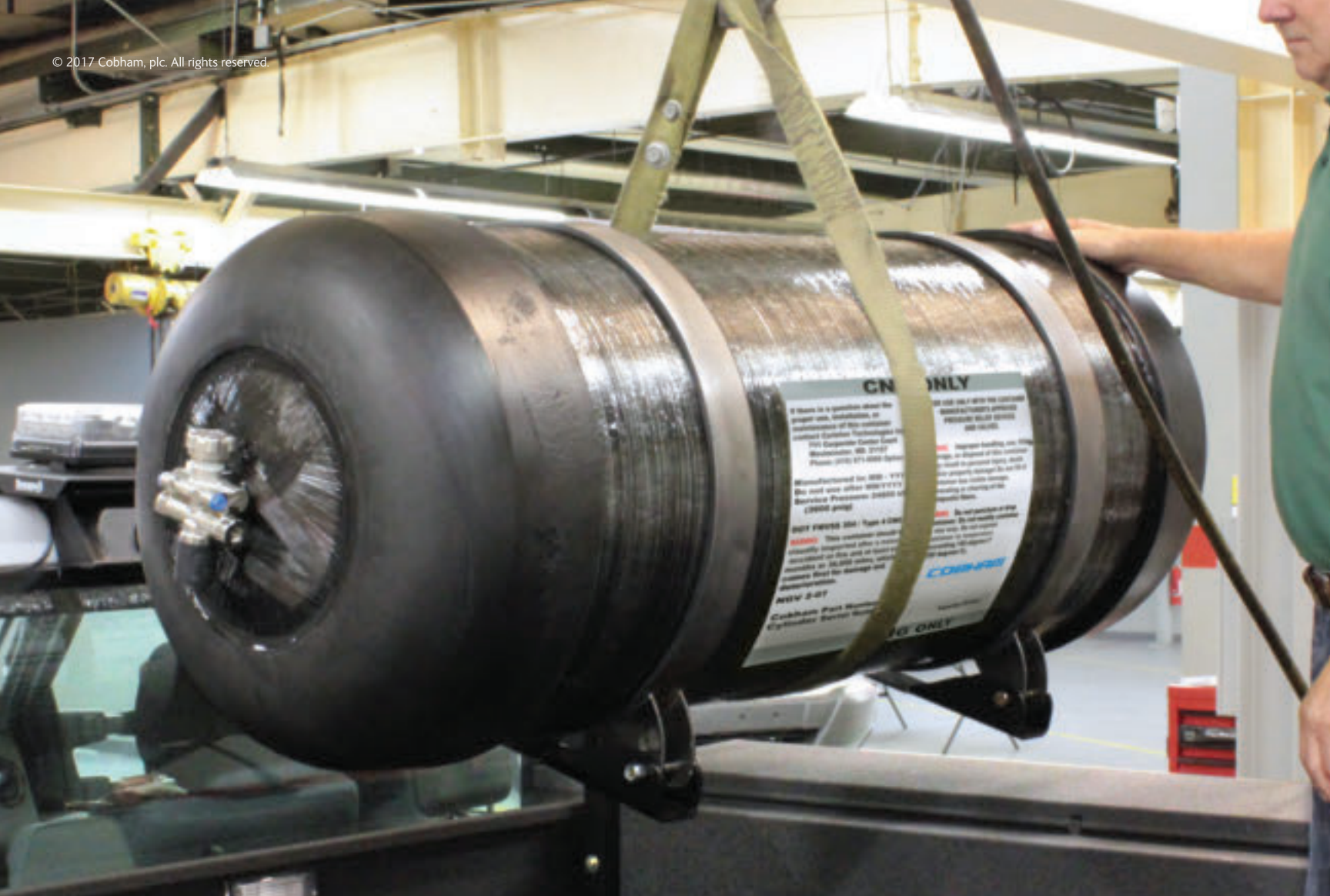
"This demo will show how fuel cells can help support the heavy-duty sector's efforts to increase efficiency, transition to zero-emission technologies, and increase competitiveness," said Janea Scott, a commissioner with CEC, the California Energy Commission.

Why the Kenworth T660? "We've got a strong relationship with Kenworth and their parent company Paccar through our logistic operations," a spokeswoman told *Fleets & Fuels*. In late 2015, Toyota enthusiastically publicized trials of a compressed natural gas/CNG-fueled Peterbilt 365 for car-hauling. Peterbilt, like Kenworth, is a Paccar company.

Kenworth is at Booth 1019.

Toyota's 'Project Portal' truck was built using a Kenworth T660 glider.





CNG Cylinders - How and when you need them

COBHAM

The most important thing we build is trust

Order Exact Quantities Desired

Order the quantities you need, when you need them, to grow your business, not your inventory.

Quick Turnaround

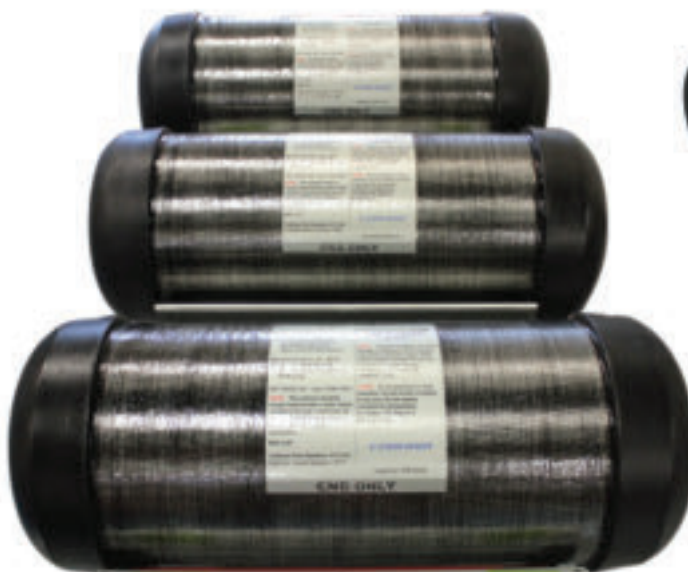
Expect the same First In Class customer service and on-time delivery our aerospace customers demand.

Customized Solutions

We will work with you to meet your customer needs with optimized sizing for maximum yield.

Added Safety & Reliability

Tested above and beyond required standards by the same talent that produces tanks for Space.



Cobham Type 4 Cylinders



Strap and Boss Mounts



Valves and Relief Devices



Kenworth Goes Electric for Ports

Low- and Even Zero-Emission T680 Day Cab Prototype

Kenworth is developing electric-drive T680 day cab tractors for ports drayage: blue for CNG-fueled hybrid and green for zero-emission hydrogen.

Kenworth said here yesterday that it's continuing to advance its low- and even zero-emission T680 day cabs for drayage tractor operation in Southern California ports, backed by \$9 million in government grants awarded last August.

Kenworth is developing a prototype Class 8 hydrogen fuel cell tractor designed to provide true zero-emissions operation. The design employs a Ballard Power Systems fuel cell to charge the lithium ion batteries that power a dual-rotor electric motor, driving the rear tandem axle through a 4-speed automated transmission.

Kenworth says that its hydrogen truck is expected to be ready for initial track and on-road testing in the fourth quarter of this year.

Just this week, Kenworth began building a second prototype series hybrid-electric T680 day cab

designed to produce near-zero-emissions. The vehicle will use the super low-NOx – and currently available – Cummins Westport ISL G Near Zero engine fueled by CNG to generate electricity. Initial track and road testing is expected to start in the fourth quarter.

"These two T680 tractors will be identical," Kenworth says, "with the exception of their power generation systems." Each will have an electric-only range of approximately 30 miles, while the onboard fuel – hydrogen or natural gas – "will provide sufficient range for a full day in regional

haul applications."

Kenworth's work on these programs is supported by grants of \$2.1 million for each project from EERE, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy, with SCAQMD, Southern California's South Coast Air Quality Management District as the prime applicant.

A third project received \$4.8 million in funding from the California Air Resources Board, again with the SCAQMD as the prime applicant. Starting in 2018, and drawing on data collected from 2017 the hybrid-electric T680, Kenworth will build four additional hybrid-electric T680 day cabs equipped with the Cummins Westport ISL G Near Zero NOx engine operating on CNG, and will support customer field tests in Southern California drayage operations.

All six prototype T680 day cab drayage tractors, produced as a result of these Kenworth programs, will transport freight from the Ports of Los Angeles and Long Beach to warehouses and railyards in the Los Angeles basin.

"These T680 day cab projects provide an excellent opportunity for Kenworth to develop and advance important technologies that may play a critical role in the trucks of tomorrow," said Kenworth chief engineer Patrick Dean.

"Within the next decade," he said, "hybrid-electric powertrains are expected to be required to satisfy emissions regulations in several major U.S. metropolitan areas. For example, California is considering regulations that will require zero-emission levels for port drayage trucks operating in specifically designated areas.

"We look forward to playing a leadership role to meet the opportunities and challenges ahead."

Kenworth is at [Booth 1019](#).



This new Kenworth T880S concrete mixer for Catalina Pacific, powered by the Cummins Westport ISL G Near Zero engine and photographed here in Long Beach, may be seen at [Booth 1019](#).

FUEL FORWARD

Drive your fleet into the future
with *Clean Energy*® Natural Gas fuel.

Learn more about the many benefits natural gas fueling offers
fleets like Raven Transport at www.CleanEnergyFuels.com/Raven



 **Clean Energy**®
www.CleanEnergyFuels.com

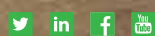


ABB for (Far) Faster Electric Vehicle Charging

Multinational ABB is a pioneering technology leader in electrification products, robotics and motion, industrial automation and power grids, serving customers in utilities, industry and transport and infrastructure globally. The firm's 0.32 Terra 53 fast charger is designed to meet the needs of the "charge-and-go driver."

Main features of the dual outlet 50kW fast charging station include a 30-80% charge in 15 minutes, CCS and Chademo compliance, and continuous output at high temperatures."

The system is at the upper end of the 20- to

50-kilowatt hardware needed to charge today's EVs along highways, in cities, at retail centers, and for fleets.

Charging the next generation of EVs with 200-plus miles of range on long distance highway corridors will require 150- to 350-kilowatt charging systems.

As a significant milestone along that corridor, the company has recently developed a 150-kilowatt research unit that is capable of "providing a charge which is three times faster than what is available today."

The unit is being deployed by EVgo, which has installed the charger at a Lucky Supermarket in Fremont, Calif. The area has the highest traffic in the EVgo network, EVgo says, "making it a natural fit for the rollout of a next generation charging station."



ABB-EVgo super-fast EV charging in Fremont, Calif.



ABB is demonstrating its Terra 53 DC fast charger at Booth 1710.

Moreover, beyond the new 150-kilowatt unit, potential has been identified for an upgrade to 350 kilowatts, which could provide the capability for 20 miles of range with just one minute of charging.

In addition to the booth demonstrations, Erin Galiger, project manager for electric vehicle charging infrastructure at ABB, will be discussing *High-Power Charging for Medium- and Heavy-Duty Commercial Fleet Vehicles* during today's *State of Charge* breakout session beginning at 2:45pm in Room 101B.

Love's Trillium CNG: Bigger Than You Think

The acquisition of Trillium by Love's Travel, which was already building a national CNG fueling network at its truck stops, was announced in March 2016. Love's customers gained access to 37 existing Trillium stations for a combined total of 65 public-access CNG facilities.

That was then. Today, Love's Trillium CNG (Booth 1011) owns and/or operates 178 fueling outlets in 27 states. Sixty-six of them are public-access, Trillium-owned stations.

"By the end of 2017," Love's spokeswoman Kealey Dorian told *ShowTimes* yesterday, "the company expects to own and/or operate more than 180 CNG locations."

Trillium CNG engineer Kim Okafor, marketing specialist Ashley Duplechien, design and build services GM Carson Hoyt, senior business development manager Dean Nicol, and business development and marketing manager Bill Zobel with CNG-fueled Ford F-350 in Trillium CNG colors at Booth 1011.



Ford Chases the Electric Vehicle

Touts First Hybrid Pursuit Vehicle to Make \$4.5 Billion Point

Ford released details last month on its \$4.5 billion drive to field no fewer than 13 new electric and/or hybrid electric vehicles globally in the next five years. The eye-catcher was a hybrid-electric police car, said to be the first hybrid ever to be pursuit-rated.

A hybrid version of the popular Ford F-150 pickup with export power was promised too – and a hybrid Mustang.

“The plans are part of Ford’s expansion to be an auto and a mobility company, including leading in electric and autonomous vehicles, and new mobility solutions,” the automaker said.

The new Ford Police Responder Hybrid Sedan is initially for New York City and Los

Angeles. “Cities could see approximately \$3,877 a year in fuel savings per vehicle, based on \$2.50 per gallon fuel prices,” Ford said, as well as less vehicle downtime for fill-ups. The car has a 2.0-liter Atkinson-cycle engine charging a lithium ion battery.

Ford (Booth 1211) also promised:

- another new hybrid police vehicle for North America;

- a hybrid version of the popular F-150 pickup, available by 2020, to be sold in North America and the Middle East, with export power;
- an all-new fully electric small SUV, coming by 2020, engineered to deliver an estimated range of at least 300 miles;
- a hybrid-powered autonomous vehicle designed for commercial mobility services;
- a PHEV/plug-in electric vehicle variant of the Transit

Custom for in 2019 in Europe, “engineered to help reduce operating costs in even the most congested streets.”



Ford PHEV Vans for London Fleets

Ford said last week that at least five fleets operating in London will test 20 Transit Custom vans – the plug-in hybrid electric vehicle version – beginning this fall.

In addition to Transport for London, the Ford PHEVs will be operated by the Metropolitan Police, Clancy Plant, Addison Lee and British Gas.



Ford says that its hybrid-electric police car, initially for New York City (shown) and Los Angeles, is the first hybrid ever to be pursuit-rated.

Lightning and XL Are Ford eQVMs

Lightning Hybrids (Booth 1434) and XL Hybrids (Booth 1319) were two of the three companies named as Ford (Booth 1211) established “eQVM” as a new qualified vehicle modifier program for electric and hybrid vehicles this past March.

Ford says that the new QVM category “electrifies work trucks,” but headed its announcement with Lightning Hybrids, which uses a hydraulic hybrid design dubbed ERS (for Energy Recovery System) to slash fuel use in light duty vehicles.

“The new eQVM program,” says Ford, “helps fleet and commercial customers meet their unique and specific needs for durable, reliable electrified and hydraulic hybrid work trucks that retain the original powertrain warranty.”

“Ford supports electrification for a variety of vehicle types,” said Ford sustainability and QVM program manager Dick Cupka.

“The eQVM program extends that support

to the vocational truck industry where customers need relatively small numbers of specialized vehicles,” he said: “there is no one-size-fits-all.”

Lightning notes that this past autumn, UPS placed 50 ERS-converted vehicles in its Chicago fleet. Kiessling Transit, a Massachusetts-based paratransit company, recently doubled the size of its hydraulic hybrid green fleet to 70 vehicles.

XL Hybrids late last year unveiled its first plug-in hybrid, to be available first on Ford F-150 pickups via ship-thru following installation by Knapheide Manufacturing. XL’s new XLP drive doubles the fuel efficiency boost afforded by its XL3 drive to about 50%.

XL Hybrids is also talking up a “first-of-its-kind” installation partnership with Knapheide



Ford used this photo of a Lightning Hybrids vehicle when publicizing its new eQVM program this past March.

Manufacturing, by which XL’s new XLP plug-in hybrid electric vehicle upfits will be available on Ford F-150 pickups.

The third of the initial Ford eQVMs is all-electric driveline specialist Motiv Power Systems.

FCA Hybrids: 500 More for Waymo

Fiat Chrysler Automobiles is gearing up to produce an additional 500 Chrysler Pacifica Hybrid minivans for self-driving developer Waymo, the automaker said this morning. The cars come in addition to 100 vehicles, modified for self-driving, already delivered to Waymo.

"Production of the additional 500 minivans will ramp up beginning next month," FCA says, noting that Waymo will then outfit the vehicles for self-driving. "The collaboration between FCA and Waymo has been advantageous for both companies as we continue to work together to fully understand the steps needed to bring self-driving vehicles to market," said FCA CEO Sergio Marchionne. FCA is at [Booth 1418](#).



Torque Trends Has All-Electric F-150

Arizona-based Torque Trends ([Booth 1625](#)) is looking for partners for an upfit package for light trucks it says could slash fuel costs for fleet operators while dramatically reducing repair and maintenance outlays – while it extends vehicle life. "We are now taking orders for the first production run of this bolt-on plug-and-play electric conversion package," says Torque Trends CEO Mitchell Yow. His firm describes the "ev-TorquePack" as "a complete bolt-on plug-and-play electric conversion package for fleet trucks" – with promise of savings of up to 75% on fuel, 60% on repairs and maintenance, all with 50% extended truck life (three or even five years). Torque Trends ([Booth 1625](#))

is using a 135-kilowatt AC motor and inverter package from Colorado's UQM Technologies for its F-150 upfit.



L9N for New Volvo VNR – Maybe

Volvo trucks will offer the super low-NOx L9N – formerly the ISL G Near Zero – dedicated-natural gas engine from Cummins Westport in the latest version of its VNR regional haul tractor "later," says a spokesman, "based on market demand." The new VNR "will first be available with our D11 and D13 diesel-powered engines," he told *Fleets & Fuels* after the truck was unveiled at ExpoCam in Montreal on April 20. The new VNR is described as "a versatile regional haul tractor designed and developed for the modern professional truck driver and the rapidly evolving demands of goods delivery." Cummins Westport ([Booth 936](#)) re-christened the 8.9-liter engine as the L9N here Monday.



Bauer for Quiet & Remote Monitoring

Among its ACT Expo 2017 displays, Bauer Compressors ([Booth 1235](#)) is highlighting two new features on its C-23 compressor. The unit is designed to meet the needs of medium to large vehicle fleets.

"The first thing we're highlighting this year is the quietness of our units," says marketing director Matt Henry. "Our units can get down to 65 decibels at one meter – lower sometimes, depending on some variables – which makes it a good neighbor for fill stations in a residential area. In fact, that option makes it a little less than a standard dishwasher, which runs about 70 decibels."

Another feature being highlighted this year is the Bauer Remote HMI, which provides 24/7 interactive control over remote units.

"Bauer is known for its high quality compressor systems," says Tahsin Durak, a Bauer electrical engineer credited with the HMI design. "And we are always adding additional intelligence technology in our systems. What this new HMI design means is that a customer can monitor their compressors remotely from anywhere on the globe."

"We give them the ability to see compressor functionalities and provide updates so they don't have to send a technician

each time, when they really just have to push a reset button," he said. "They can basically push the reset button remotely, from 1,000 miles away."

"Additionally, in a couple of months, we will offer customers a new dashboard so that they will be able to see, from any laptop, the entire configuration of their compressor through a virtual private network."

"Not only will they be able to monitor, but also change configurations if they desire."



Bauer is promoting its C-26 X-Fill for large fleet applications alongside the C-23 compressor on show at [Booth 1235](#).

Roush Pushes Propane for Medium Duty

Roush CleanTech ([Booth 815](#)) is promoting the potential for propane autogas for medium duty vehicles.

"Propane has traditionally been viewed as a light duty fuel for light duty vehicles," says sales VP Todd Mouw.

"We're dispelling that myth," he says, noting both a 33,000-pound GVW Ford box truck and a Class 5 Bimbo's bakery truck on show by PERC, the Propane Education & Research Council ([Booth 911](#)).

Noting that the medium duty power train is already operating in approximately 10,000 school buses around the country, he added, "So when people ask us if it is tried and true, the answer is that we have got that power train in many box trucks but also in a ton of school buses racking up 300 million miles of really good data."

Mouw said that the company started in light duty six or seven years ago, "but there wasn't enough impetus for our customers, unless they were a very high mileage fleet, to justify that kind of investment.

So that transition to Class 4 through 7 in school buses has been really good for us."

"We're excited about it," he told *ShowTimes*. "We're trying to get this market, specifically in California, to recognize how good propane and our technology really is."

"Not that hydrogen, electric or natural gas is bad, but when you talk about return on investment and best bang for your dollar with emissions reductions, propane plays pretty nicely in that space."



Roush CleanTech sales VP Todd Mouw.

ANGI Offers App for Fuel Providers

ANGI Energy is promoting a new app for iPhones and other devices allowing CNG fuel providers to remotely monitor the operation of their stations.

Developed for existing customers as well as new ones, the ANGI "CNG Live" application makes checking the status of ANGI CNG equipment "easier than ever," the company says: the app "provides you with 24/7 remote access to the operating status of your ANGI CNG sites from anywhere in the world."

The app features an intuitive, user-friendly graphical interface scalable for any site configuration. It handles live operating data on compressors, boosters, dryers, dispensers, and most valve panels, and can provide history reports covering compressor pressure and temperature, run times, dispenser fill totals, and site alarms.



ANGI's 'CNG Live' application 'provides you with 24/7 remote access to the operating status of your ANGI CNG sites from anywhere in the world,' the company says.

The app is automatically connected with ANGI systems with CP-400 delivered from the fourth quarter of 2016, and "any site that includes a CP-400 unit with ANGI server connectivity can be set up.

"While the market has been challenging, we are making great progress at ANGI," sales VP Jared Hightower said on the eve of ACT Expo.

"We have several new products in development, which are following the launch of our class-leading Encore dispenser."

"ANGI is also supporting some of the largest CNG fleet programs in North America," Hightower said. The firm furnished the fueling infrastructure for "many of Waste Management's CNG installations," he noted, and "is working

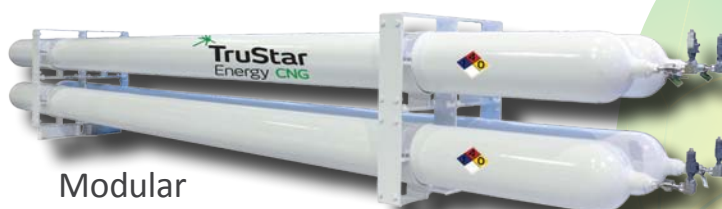
with TruStar and utilities such as Piedmont, FortisBC, and AGL on the UPS program.

"Transit has continued to be a critical sector for us with equipment supply to Trillium CNG for the RTC Las Vegas projects and to Clean Energy Fuels for the NICE and New Jersey transit projects.

"Finally," Hightower said, "ANGI is pleased with the progress we are making in Latin America, especially Mexico, where the conditions are right for CNG vehicles and virtual pipeline applications."

ANGI Energy Systems (Booth 653) was acquired by Gilbarco Veeder-Root in mid-2014.

CP INDUSTRIES Compressed Natural Gas Solutions



Modular
Assemblies
ASME



Trailers
DOT/ISO



Type IV
NGV-2

CP Industries is the
Industry's Choice Since 1897

CNG



2214 Walnut Street, McKeesport, PA 15132 Phone: 412-664-6604
Email: info@cp-industries.com Visit us at: www.cp-industries.com

Workhorse to Ride with Ryder

Workhorse unveiled its half-ton W-15 PHEV pickup here yesterday, as Ryder System said it would serve as both distributor and support partner for the W-15 and other Workhorse products.

Workhorse (Booth 1844) has multiple triple digit orders from UPS for its extended-range E-Gen electric delivery vehicle, and is developing a drone aircraft – in testing by UPS – to facilitate package deliveries, especially in rural areas.

The company's new W-15 plug-in hybrid electric vehicle is designed to compete with the popular Ford F-150 and with GM and Chrysler 1500-series pickups.

Ryder said it will be “the exclusive maintenance provider for Workhorse's entire light- and medium-duty range-extended electric vehicle fleet in North America and will provide a combination of warranty and maintenance services as part of Ryder's SelectCare fleet maintenance portfolio.

“Ryder will also serve as the primary distributor in North America for Workhorse's E-100 and E-Gen range-extended medium-duty vehicles, as well as the W-15.”

“We commend them for their leadership and decision to partner exclusively with Ryder for their range-extended electric commercial vehicle maintenance needs,” Ryder global fleet management solutions president Dennis Cooke said of Workhorse.

“This relationship will help make electric commercial vehicles more affordable and reliable, so more businesses can take advantage of their environmental and efficiency benefits,” he said.

With Ryder SelectCare maintenance, “Workhorse will be able to maximize uptime, lower costs, and keep their customers' businesses moving,” Ryder said.

“Ryder is the global leader in commercial fleet management, yet they're incredibly agile and forward thinking, especially in their approach to transportation

innovations and advanced vehicle technologies,” said Workhorse CEO Steve Burns.

“With Ryder, we can bring our leading-edge range-extended electric vehicle technology to a larger base of businesses that are looking to improve efficiencies, save on fueling costs, and get better performance from their fleets.”

The Workhorse E-100 and E-Gen medium-duty vehicles are available to customers in North America. The W-15 electric pickup truck is expected to be in production in late 2018.



The NEXT GENERATION of fuel dispensers is now

Introducing **Optima™** the most advanced CNG fueling dispenser on the market today.

Optimize your station experience with:

- Unmatched data collection and communication capabilities
- Remote connectivity from your laptop, tablet, or smart phone
- Visually follow fill progression on new PULSE™ companion display
- Increased insight into dispenser status at all times
- Superior analysis tools
- Compliance with the strictest industry codes and safety standards

Optima™ delivers smarter control, increased efficiency, and higher profitability



To learn more go to www.krausglobal.com, call 512-663-7292 or visit us at Booth 745 for a demo



BOOTH 745 VISIT US AT

ChargePoint: Flying Higher

ChargePoint, the leading supplier of networked chargers for electric vehicles, last week said it was teaming with Uber in support of a global vertical takeoff and landing transportation network.

“ChargePoint will develop the world’s first charging solutions for

electric VTOL vehicles, enabling these aircraft to make more trips, serve more passengers and transform the way people get around the cities of tomorrow.

“The partnership marks a pivotal moment in the history of electric mobility and a major shift in the

future of transportation,” ChargePoint (Booth 1713) said.

Uber calls the VTOL initiative Elevate, and has named partners including real estate companies, aircraft manufacturers, cities – and electric vehicle charger manufacturers.

Earlier this year, Florida-based ChargePoint distributor Apollo Sunguard was awarded a BPA/blanket purchase agreement by the GSA Fleet arm of the federal General Services Administration.

The base period for the new BPA – designated GS-30F-GA082 – ends on February 28, 2018, with options extending it through February 2021.

Also this year, ChargePoint launched a DC fast charge line dubbed Express Plus and subsequently moved to expand its operations to Europe.



ChargePoint's CT4000 series chargers are designed 'for property owners, businesses and municipalities that are looking for charging stations for their employees, customers, residents and fleets.'



Gain Branding for AFS Houston

U.S. Gain (Booth 1252) has partnered with AFS/American Fueling Systems (AFS) to add the Gain Clean Fuel CNG brand to AFS's recently opened fueling outlet in Texas – the largest public-access CNG and diesel fueling station in Houston, serving both commercial and personal vehicles.

“Co-branding the facility is an excellent opportunity for our business growth and for Houston,” said Rahim Charania, CEO of AFS. “U.S. Gain has an excellent reputation in the industry and an unmatched network of CNG stations for carriers to take advantage of throughout North America.”

The Houston facility offers six, high-speed CNG fueling lanes for medium and heavy-duty fleet operators and eight lanes for diesel operations. “We anticipate market demand for CNG to grow significantly over the next few years but, while oil prices remain low, there’s also a demand for diesel,” Charania said. “By providing both, customers have the option to choose.”



VIRTUALLY On-Site

Quality. Our DNA

COVINGTON, GEORGIA

L-SERIES UNIT

REEDLEY, CALIFORNIA

C26 X-FILL UNIT

HANCEVILLE, ALABAMA

M-SERIES SIMPLEX UNIT

BOOTH# 1235

INTRODUCING THE BAUER REMOTE HMI™— Monitoring your CNG compressors just got easier! Have 24-7 full interactive control of your compressors wherever you go. You can always be *Virtually* on-site.

Visit our booth to learn more and see our customer testimonials.

Connect with us.

sls@bauercomp.com

www.BauerCNG.com

Renewable Natural Gas: What's the Fuss?

Q&A with Tyler Henn, VP and General Manager, Clean Energy Renewables

Please tell us a little bit about renewable natural gas and why it's getting so much attention.

Renewable natural gas, or RNG, is biogenic methane that is naturally generated during the decomposition process of organic waste such as food and other waste from sources like dairy farms and landfills. We capture and purify it, then put it back into the pipeline for our customers under the brand name Redeem™. And what makes it so exciting for us and our customers, is that it's the cleanest transportation fuel available,

reducing greenhouse gas emissions by up to 70% today over diesel.

There's been a lot of discussion about matching RNG with some of the new technologies here. Can you talk about that?

Absolutely. Not only is RNG already the cleanest fuel around, but the studies we're seeing when you combine it with the new Cummins Westport Low-NOx engine are simply astounding. UC Riverside has tested the technology and found emissions to be .002 g/bhp-hr, 90% below the CARB standard, and 99.8% cleaner than a 2010 diesel truck. And we're already seeing industry leaders like FedEx, LA Metro, Republic Services and Santa Monica Big Blue Bus transitioning their fleets to the technology.

Obviously electric trucks have caught some of the attention lately. Where do you see RNG fitting in?

First I think the market recognizes that it will be quite a while, maybe 10-15 years, until electric trucking comes to the heavy-duty trucking sector. Second, and this is lost on a lot of people, electric vehicles aren't as green as some claim. In fact, when you account for the emissions created from producing the electricity that runs those cars, which

often comes from coal-burning power plants, our RNG combined with these new engines provides cleaner emissions than electric, based on a well-to-wheels comparison. With electric, people always talk about tailpipe emissions but they choose to ignore the upstream emissions of making that electricity. You can't have it both ways.

The market for RNG certainly has been growing. Is the industry prepared for the growth?

Absolutely, and I expect it to continue. We've seen our volumes grow from 20 million GGEs in 2014 to approximately 60 million GGEs in 2016, almost a 200% increase, so we're certainly enjoying the benefits. And the industry is prepared to grow along with it. Here in California I know that CARB commissioned a study and validated that there are substantial sources of RNG right here in California.

So you see the RNG industry here in California expanding?

The entire RNG industry across the nation is expanding, but especially here in California. If you were here Monday you know that a study by the RNG Coalition was released stating the industry could create up to 130,000 new high-paying jobs, and add \$14 billion to California's economy. So I think the growth will be a benefit to all of us.



Westport Awaits HPDI 2.0 Debut

Westport weighed into 2017 as a far larger company, as the former Westport Innovations closed on its merger-acquisition of FSSI/Fuel Systems Solutions, Inc. to emerge as Westport Fuel Systems in mid-2016.

The combined company logged sales of \$224.9 million for the year, up from Westport's \$103.3 million in 2015.

Nancy Gougarty is CEO.

The merger brought such well known alt fuel vehicle brandnames as Impco, BRC (and BRC FuelMaker), Cubogas, Emer, GFI, OMVL, Prins, Valtek and Zavoli under the Westport umbrella – joining Westport WiNG for CNG-fueled light-duty NGVs and the Westport Ice-Pack LNG fuel tank line.

An emerging key brand is Westport HPDI 2.0, the second version of Westport's high pressure direct injection technology for operating

diesel engines primarily on natural gas, thereby preserving the fundamentally efficient compression-ignition cycle.

First announced in 2013, HPDI 2.0 is expected to be debuted by multinational Volvo Trucks late this year.

Affiliate Cummins Westport is supplier of dedicated-natural gas spark-ignition engines, including the announced at ACT Expo 2017 low-NOx line comprising:

- the 6.7-liter B6.7N,
- the 8.9-liter L9N (formerly the ISL G Near Zero), and
- the 11.9-liter ISX12N (Booth 936).



Westport Fuel Systems CEO Nancy Gougarty

Xebec's Better PSA: Fast Cycle for RNG

'Game-Changer' as Novel Cycle Yields Up to 98.5% Recovery

Xebec Adsorption (Booth 553) is promoting an improved pressure swing adsorption architecture for upgrading biogas to biomethane. By optimizing fast-cycle PSA technology process design "and combining it with a novel adsorption/desorption cycle," the company says, "Xebec can now achieve recovery rates of up to 98.5% while operating at low pressure, allowing operators to maximize revenue, lower operating costs and, consequently, increase profitability."

The result is more practical RNG/

renewable natural gas.

Xebec notes that it pioneered fast- and rapid-cycle adsorption technology, bringing its proprietary technology to the biogas upgrading market more than 15 years ago. Today the Montreal-based company "is a major player with 27 installations operating globally and a growing number of ongoing projects under planning, procurement and construction."

Biogas upgrading, the firm says, is an engineering and process design challenge "because gas compositions constantly vary, flow rates fluctuate, and temperatures change with seasonal and weather conditions."

"Operators need technology solutions that are flexible, reliable, and cost-effective in order to maximize profits," Xebec says, claiming "a sterling reputation for delivering product gas that meets all of these objectives at a quality that can be injected into the pipeline systems."

PSA recovery rates

typically deliver recoveries in the 94% to 96% range, Xebec says. "With this breakthrough in the PSA process and cycle design, Xebec can offer a step change in achievable recovery rates, up to 98.5%, offering its proven adsorption technology that is cost effective, flexible and highly reliable."

Xebec can now achieve recovery rates of up to 98.5% while operating at low pressure, allowing operators to maximize revenue, lower operating costs and, consequently, increase profitability."

"This is a game-changer for Xebec," said Xebec president and CEO Kurt Sorschak. "With this improvement in recovery to 98.5%," he said, "we are now offering clear economic advantages to our customers..."

"With 21 projects in our current pipeline," he said, "customers have clearly taken to Xebec's new biogas upgrading solution."



A Xebec PSA/pressure swing adsorption installation in France. Installation employing the company's new fast-cycle designs in Europe are already achieving the new performance levels, the company says.



Endress+Hauser for 'CNGmass' Flowmeter

The use of compressed natural gas to fuel the powerful engines used in shale gas production just got easier, says Endress + Hauser. The company is introducing a new Coriolis mass flowmeter aimed at improving the loading efficiency of CNG brought to shale gas production sites in tube trailers at Booth 855. "With the availability of large amounts of shale gas, domestic use of natural gas has become more popular over recent years," E+H says. "But not all gas producing sites have direct access to gas pipelines, so 'virtual pipelines,' transporting natural gas by means of tube trailers, are now operating across the country to connect

gas-producing sites to gas pipelines, or directly to industrial consumers."

"With the release of the D8CB25 CNGmass flowmeter," the company says, "the tube trailers can now be loaded more efficiently."

"Not only is the loading time of a trailer cut, but the loading pressure in the tube trailer is increased. This results in the transportation of more energy in less time."

The new meter measures mass flow up to 7,800 scfm/standard cubic feet per minute at temperatures up to 257F (125C), and pressures to 5,080 psi. The instrument measures direct mass or corrected volume flow with 0.5% accuracy to meet custody transfer standards, E+H says.

The new D8CB25 CNGmass flowmeter from Endress + Hauser



CNG FOR YOU

Ariel Corporation.

The worlds largest manufacturer of reciprocating natural gas compressors.

Visit us at Booth #637



www.arielcorp.com

HHP Summit 2017: Jacksonville in November

Organizers of the High Horsepower (HHP) Summit have announced that the sixth edition of the annual gathering will take place **November 6-9, 2017** at the Prime Osborn Convention Center in Jacksonville, Fla.

Jacksonville is the base for the world's first liquefied natural gas-fueled container ships, operated by Tote Maritime and soon by Crowley Maritime, and is a pioneering center for



Chart Ferox built the LNG storage tanks for the Eagle LNG facility in Jacksonville in the Czech Republic. Chart Industries is at [Booth 537](#) here.

commercial LNG bunkering and LNG-fueled rail operations as well.

Eagle LNG Partners is building a shore-side LNG fueling facility in Jacksonville to support two new Commitment-Class LNG ships being prepared for Crowley to connect Florida with San Juan, Puerto Rico.

Already plying the Jacksonville-San Juan route are two LNG-fueled ships operated by Tote (which is also planning to convert two ships connecting

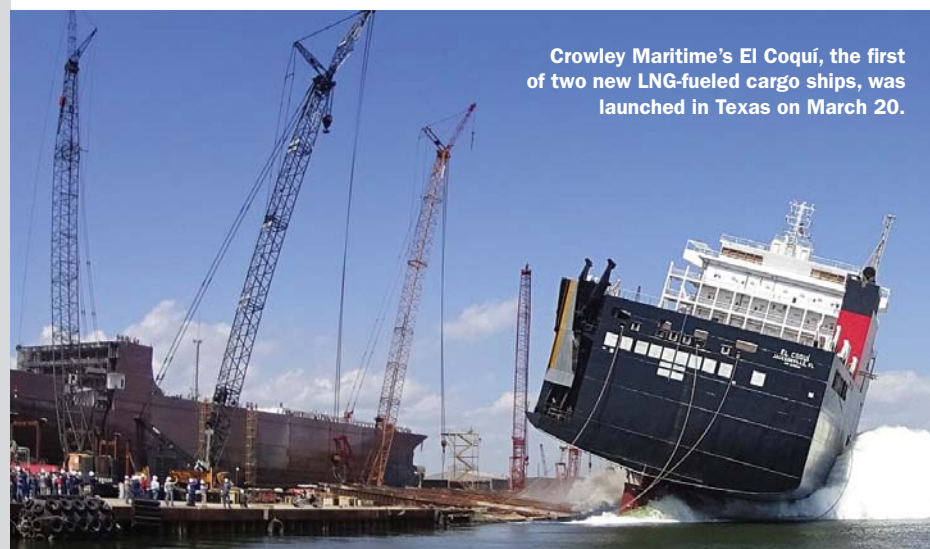
Tacoma, Wash. and Alaska to LNG operation). The first of Tote's two Marlin-class vessels, the *Isla Bella*, entered service in October 2015, joined by sister *Perla Del Caribe* in February 2016.

Fuel for the Tote ships is currently trucked to Jacksonville from Macon, Ga. as a new liquefaction unit by Jax LNG is built.

As is the ACT Expo series, the HHP Summit, is organized by Gladstein, Neandross & Associates.

The next Advanced Clean Transportation (ACT) Expo, by the way, will again be here at the Long Beach Convention Center. ACT Expo 2018 takes place **April 30-May 3, 2018**.

GNA is at [Booth 1119/1125](#).



Crowley Maritime's *El Coquí*, the first of two new LNG-fueled cargo ships, was launched in Texas on March 20.

Transit RNG & Low-NOx Webinar May 16

Southern California Gas ([Booth 932](#)) is hosting an educational webinar to promote the economic and environmental benefits of the emerging 0.02 grams per brake-horsepower NOx natural gas engines fueled by RNG/renewable natural gas.

The combination of RNG – aka biomethane – and the new “Near Zero” engines is “the most important development for sustainable transit operations in decades,” organizers say.

The free, hour-long webinar will be held on **Tuesday, May 16** beginning at **10:00am Pacific / 1:00PM Eastern time**.

The scheduled speakers are:

- John Drayton, vehicle technology director at LA Metro. This past autumn, his agency deployed the first commercially available ISL G Near Zero engines from Cummins Westport in New Flyer buses. Drayton will discuss their performance following several months of daily operations – power, range, emissions and reliability of these ultra-clean engines. Drayton



will also discuss how LA Metro is procuring a steady supply of renewable natural gas.

- Patrick Couch, technical services VP at the clean transportation

and energy consultancy GNA/Gladstein, Neandross & Associates. He'll describe how heavy duty vehicles with Cummins Westport's Near Zero engine boasts NOx emissions equivalent to heavy duty battery-electric vehicles – even in states with the cleanest electrical grids – California, Oregon, and Washington.

- David Cox, director of operations and general counsel with the Sacramento-based Coalition for Renewable Natural Gas. He's to provide insight on how renewable natural gas enables fleet operators to reduce greenhouse gas emissions by 40% to 400%. Cox will also give an update on the projected RNG supply opportunities in California.

ACT Expo host GNA ([Booths 1119 and 1125](#)) is helping organize the SoCalGas webinar.

Register at learn.gladstein.org/socalgastransit.



NGVi Tasty Treats Today

NGVi, the Las Vegas-based Natural Gas Vehicle Institute, is handing out ice cream and cookies at [Booth 1053](#) from **2:00pm-5:00pm** today – and advice on NGV training throughout the show.

“We can help you increase your fleet safety,” NGVi says.

“Our customer solutions experts understand the real-world challenges faced by NGV fleets, and will be available for one-on-one conversations to help you determine what options are best for your organization.”

You may also win a free NGVi CNG Fuel System Inspector course package, a \$2,000 value.



CLEAN TRANSPORTATION & ENERGY CONSULTANTS



Providing a full suite of services to manage your project from start to ROI.

-  FLEET PLANNING ANALYSIS
-  FUELING PROCUREMENT & INFRASTRUCTURE
-  MAINTENANCE FACILITY MODIFICATIONS
-  GOVERNMENT & PUBLIC AFFAIRS
-  REGULATORY COMPLIANCE
-  GRANT WRITING & FUNDING PROCUREMENT

www.gladstein.org

Organizers of



marketing & media strategists
for clean tech

Strategy • Design • Digital
Experiential • Outreach

Portfolio

www.creative.gladstein.org

A division of  GLADSTEIN,
NEANDROSS
& ASSOCIATES



CLEAN TRANSPORTATION & ENERGY CONSULTANTS

FUNDING 360



GNA's Funding 360 Program
helps companies track, evaluate,
and apply to funding programs.

 **92%**
APPLICATION
SUCCESS RATE

 **350**
MILLION IN SECURED
GRANTS & FUNDING
FOR CLIENTS



Move to Zero

B6.7N™ L9N™ ISX12N™

The 2018 B6.7N, L9N, and ISX12N continue the evolution of emission leading natural gas engines from Cummins Westport, offering the lowest certified NOx emission engines in North America – up to 90% lower than current national EPA standards.

Fuelling ultra low NOx vehicles with clean, domestic natural gas or low carbon intensity renewable natural gas provides significant well-to-wheel GHG reductions. The B6.7N, L9N, and ISX12N will be available in Q1 2018 from leading truck and bus OEMs. Make a Move to Zero with the natural choice.

CNG

LNG

RNG

For more information visit:
cumminswestport.com

