



## Stakeholder Newsletter

Volume 1 - January

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## Diamond and Platinum Level Stakeholders

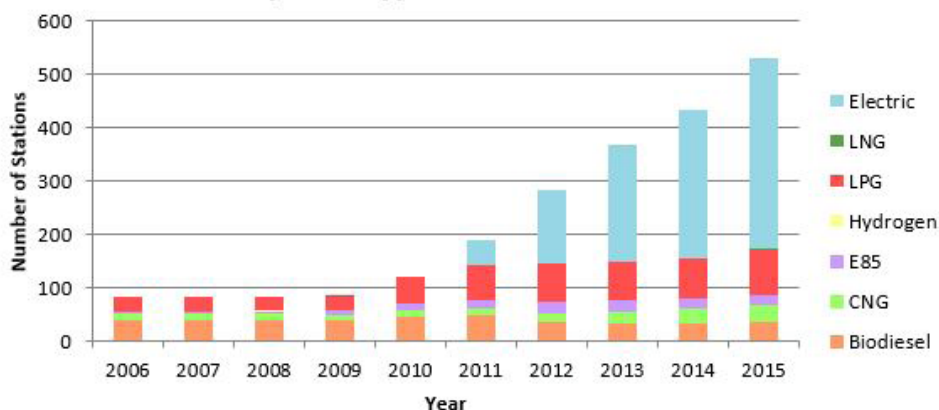


## Virginia 2015 Alternative Transportation Fuels Report

For the year ending December 31, 2015, the Commonwealth of Virginia saw an increase in the number of tracked alternative fuel fleet vehicles by 9.14%. The current percentage of alternative fuel vehicles used in Virginia fleets is 39.73%, with a two-year average of 28.6% and a five-year average of 26.0%. All alternative fuel vehicle types exhibited growth in 2015 with the exception of propane vehicles. Despite a decline in biodiesel use in previous years, there was a 16.62% increase in tracked biodiesel vehicles for 2015. The vehicles reported are in service with private business fleets and local, state and federal government fleets.

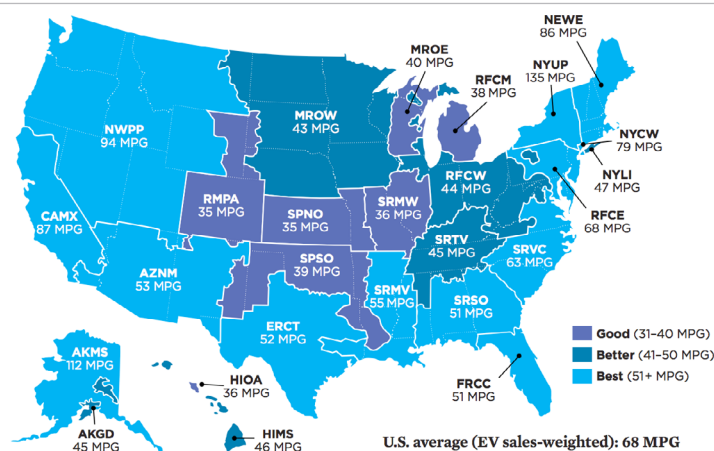
The total number of alternative fuel stations reported for the Commonwealth of Virginia in 2015 is 530. Of those stations, 401 are public and 129 are private stations. Although some fuel types showed no growth or negative growth, the total number of alternative fuel stations in Virginia increased by 22.35% with the addition of 97 stations. Virginia had a growth of 79 electric vehicle charging stations, marking a 28.4% growth for the year. LPG stations also exhibited a large percent growth with 11 stations opening in 2014 for a growth of 14.9%. There was no growth in the number of LNG stations and there was a slight decline in hydrogen stations, with the one station from 2014 closing this year. A slight growth in biodiesel and CNG stations was also seen, with 4 new stations of each opening in 2015. Overall, there was a 22.35% increase in stations, with 97 new stations reported in Virginia in 2015.

**10 Year Growth in Virginia Alternative Fuel Stations  
by Fuel Type: December 2015**



## Electric Cars: Cleaner Cars from Cradle to Grave

The Union of Concerned Scientists released a report in November 2015 that explained how electric cars beat gasoline cars based on lifetime global warming emissions. The UCS found that: (1) driving the average electric vehicle in any region of the country produces lower global warming emissions than the average new gasoline car achieving 29 MPG; (2) ratings in 20 out of 26 regions have improved since a 2012 report; and (3) about 66 percent of Americans—up from 45 percent just three years ago—live in regions where powering an EV on the regional electricity grid produces lower global warming emissions than a 50 MPG gasoline car. The full report can be found [here](#).



## Alliance AutoGas Pursuing CARB Certification for 2016 Ford Transit

Alliance AutoGas has announced the pursuit of CARB certification for the 2016 Ford Transit, for which it is currently taking orders in 49 states.

Certifications are secured by Blossman Services Inc. (BSI), the equipment distributor for Alliance AutoGas. BSI is the United States distributor and the Manufacturer of Record (MOR) for EPA and CARB certifications on behalf of Alliance AutoGas and its members.

Alliance AutoGas has converted more than 7,400 vehicles to run on cleaner-burning, domestically-produced propane autogas. In 2015, Alliance members collectively displaced 45 million gallons of gasoline and produced \$54 million in fuel cost savings for the 460 fleets they service.

Official EPA testing on propane has shown a 13% reduction in CO<sub>2</sub> and 33% reduction in Methane emissions.



## Rally AT THE RACEWAY

[Register Today](#)  
for Virginia Clean Cities'  
Third Annual  
Rally at the Raceway

April 7, 2016  
4:30-7:30pm  
at the Richmond International Raceway

The Rally at the Raceway is Virginia's premier alternative fuel vehicle event, supporting Virginia Clean Cities' mission to advance air quality and economic security.

Join vendors, industry leaders, and fellow vehicle enthusiasts. Event includes vendor booths, an awards ceremony, and the opportunity for a Ride & Drive on the Richmond International Raceway track. Bring your alternative fuel vehicle and take it for a spin!

Sponsorship opportunities are available [here](#)

Current Stakeholders: Please use discount code "Rally2016" to receive a \$25 discount

## Cummins Engine Lineup Gains 2017 GHG Certification

Cummins has received certification for its lineup of on-highway diesel and natural gas engines from the U.S. Environmental Protection Agency meeting current and 2017 greenhouse gas and fuel efficiency standards.

From 2014-2015, Cummins said it improved efficiency on its engines to meet EPA 2016 and GHG 2017 requirements. On-board diagnostics requirements have been met with enhanced monitors designed to ensure that tailpipe emissions stay within EPA limits.

A particulate matter sensor was implemented and electronic controls interact with the diesel exhaust fluid quality sensor implemented by OEMs on DEF tanks.

"Efficiency improvements implemented in the 2016 ISX15 400 hp-to-475 hp ratings will provide customers with fuel economy gains over the 2013 ISX15, ranging from 2.5% on the base engine up to 7.5% with a SmartAdvantage Powertrain with ADEPT (SmartCoast) features," said Amy Boerger, vice president of sales and support.

Cummins said it plans to incorporate more enhancements to improve performance, reliability and efficiency throughout 2016.

## Hydrogen Fuel Cell Electric Vehicles Get \$35 Million From US Energy Dept.



In December, the Energy Department announced up to \$35 million in available funding to advance hydrogen and fuel cell technologies that will reduce our nation's dependence on foreign oil and cut harmful carbon emissions. As part of the Administration's all-of-the-above energy strategy, this funding will accelerate American innovation in hydrogen and fuel cell technologies by supporting research and development, early market deployments, and domestic manufacturing. The Department also aims to develop collaborative consortia for fuel cell performance and durability and advanced hydrogen storage materials research to leverage the capabilities of national lab core teams.

The available funding includes hydrogen production, delivery, and storage research and development (R&D); demonstration of infrastructure component manufacturing, and support for Climate Action Champions deploying hydrogen and fuel cell technologies; consortia topics for fuel cell performance and durability and advanced hydrogen storage materials research; and cost and performance analysis for hydrogen production, storage, and fuel cells.

As fuel cell electric vehicles (FCEVs) become increasingly commercially available, the Energy Department is focused on advancements to enable hydrogen infrastructure including production, delivery, storage, and manufacturing, as well as continuing to reduce fuel cell cost and improve durability. More information, application requirements, and instructions can be found on the [EERE Funding Opportunity Exchange website](#).

### XL Hybrid Trial by Denver Fleet



XL Hybrids reports a pilot program with BMC, a provider of building materials and construction services, for two hybrid step vans to be deployed in the Denver area, and their performance compared with non-hybrid vehicles.

The two model year 2015 Ford E-350 vans have been fitted with XL's XL3 hybrid electric drivelines "to increase miles driven per gallon and reduce carbon dioxide emissions." They'll deliver construction supplies, lumber and wood molding products to BMC's regional stores in the Denver area, XL says. "Each van drives over 20,000 miles annually in a rigorous duty cycle involving extreme altitude and temperature changes," states a release.

This fleet will track powertrain data in four vehicles using cloud based analytics through a wireless connectivity system.

### Propane Backers See Decade of Success

Propane autogas advocates celebrated a decade of success in early December, noting at an event in Austin that American school districts now operate more than 7,000 propane autogas school buses on a daily basis.

"In all, more than half a million children ride propane autogas school buses to and from school," says the Propane Education & Research Council. According to the Texas Railroad Commission, more than 2,600 of the propane autogas school buses are on the job in Texas.

"More and more school districts across the country are facing tighter transportation budgets and they must use their resources more wisely," said PERC president and CEO Roy Willis.

"Propane autogas school buses help districts lower their fuel budgets, but the benefits don't stop there. Propane school buses improve passenger safety and reduce harmful emissions compared with their diesel bus counterparts, too," he said. Manufacturers including Blue Bird, Collins Bus and Thomas Built have included propane autogas vehicles among their school bus offerings. As of this year, Navistar-IC Bus is onboard too.

### Chevrolet Bolt EV Brimming with Tech

GM unveiled its 2017 Chevrolet Bolt EV at the Consumer Electronics Show (CES), providing additional details about its array of connectivity and autonomous driving features. The Bolt EV can offer about 200 miles of driving range for around \$30,000 after government incentives, in a compact package with interior spaciousness and 16.9 cubic feet of cargo space.

It supports DC fast charging, and offers advanced connectivity such as streaming video to a rearview mirror display, capacitive 10.2-inch dashboard touchscreen, Bluetooth-based system that syncs with a smartphone before the driver reaches the vehicle, dealer service scheduling alerts, carsharing apps, and gamification features so drivers can compare driving styles.





## Upcoming Events

For a full list of upcoming events, please visit  
[www.vacleancities.org/events](http://www.vacleancities.org/events)

**1/22/16 - Washington Auto Show Training Workshops**, Washington, D.C.

**1/25/16 National Biodiesel Conference**, Tampa, FL

**2/7/16 - Energy Independence Summit**, Washington, D.C.

**3/1/16 Green Truck Summit & Work Truck Show**, Indianapolis, IN

**3/16/16 Stakeholder EV Workshop & Lunch**, Norfolk, VA

**4/7/16 - 2016 Rally at the Raceway**, Richmond, VA

## Join Us Today

Virginia Clean Cities counts on a diverse membership base to facilitate our mission. If you are considering becoming a stakeholder, please visit our membership page at:  
[www.vacleancities.org/about/join-us](http://www.vacleancities.org/about/join-us)  
 or contact Alleyn Harned at (540) 568-8896  
[aharned@vacleancities.org](mailto:aharned@vacleancities.org)

You can also follow VCC on Twitter at  
**@VACleanCities**  
 or [www.facebook.com/virginiacleancities](https://www.facebook.com/virginiacleancities)



## Thank You to Our New and Renewing Stakeholders!



Carter Machinery Company, Inc.

**Carter Machinery Company** is the Virginia distributor of Blue Bird school buses, including natural gas and propane-powered buses. They strongly believe in the preservation of the environment as it leads to a safer, healthier world for the children they strive to protect every day.



**Dominion Resources** provides electricity to parts of Virginia and North Carolina. Dominion is committed to improving the air quality in Virginia through establishing energy conservation and renewable energy programs and also maintaining a diverse alternative fuel vehicle fleet.



**James River Air Conditioning Company** serves the Richmond area with both a residential and commercial department as well as a green energy solutions group. James River has been a valued stakeholder since 2014 and is continuing to support VCC's mission of improving air quality through their work and stakeholder support.

**Jim Norris** has joined as a new VCC stakeholder for the year. Jim serves as valued member of the natural gas community and helps further the natural gas vehicle industry through his support of Virginia Clean Cities.



**The Propane Education & Research Council** promotes the safe, efficient use of odorized propane gas as a preferred energy resource through research and development, training, and safety programs.



**Sustainable Energy Strategies Inc.** joined the coalition as a new stakeholder in 2015. SESI serves as a consultant for the alternative fuel industry, with expertise in biodiesel, E85, propane, natural gas, and electric and hybrid vehicle technologies. SESI also provides project management, grant writing assistance, infrastructure development, and serves as a government/industry liaison to help develop and grow the alternative energy