

# Stakeholder Update

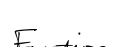


A Bi-Monthly Newsletter

May/June 2012

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## PLATINUM, DIAMOND, AND GOLD STRATEGIC PARTNERS

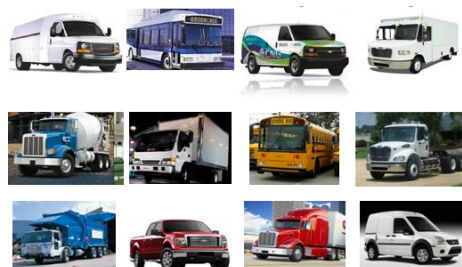


## Compelling Case for Natural Gas Workshop Coming to Richmond

As fuel costs rise and bottom lines get tighter, fleets here in the Commonwealth and around the nation are turning to natural gas vehicles as an option to increase efficiency and lower costs transit agencies, refuse companies, food & beverage distributors, municipal governments, private trucking firms, airport shuttle services, courier services, private contractors, school districts and utility companies can all lower their fuel costs by 30-50% by transitioning their fleets to vehicles powered by natural gas.

Natural gas is a mixture of hydrocarbons, predominantly methane. As delivered through the pipeline, it also contains hydrocarbons such as ethane and propane and other gases such as nitrogen, helium, carbon dioxide, hydrogen sulfide, and water vapor. Natural gas can be produced from gas wells or as a result of crude oil production. Natural gas has a high octane rating and excellent properties for spark-ignited internal combustion engines. It is non-toxic, non-corrosive, and non-carcinogenic. It presents no threat to soil, surface water, or groundwater.

Natural gas is traditionally less expensive than gasoline and moved to stations by pipeline. Natural gas stations offer either fast fill or slow fill depending on fleet or public needs. Natural gas is produced domestically in high volumes.



On July 25th, Virginia Clean Cities along with the City of Richmond Department of Public Utilities, NAFA Fleet Management Association Old Dominion Chapter, Virginia Natural Gas, the Sustainable Transportation Initiative of Richmond, and the Virginia Department of Mines, Minerals, and Energy will present a Compelling Case for NGVs Workshop. Compelling Case workshops are designed for public and private fleet operators and policy-makers and cover several key topics related to the use of natural gas vehicles in fleets. The workshop will

present an overview of natural gas and natural gas vehicles, and show how market and environmental forces are driving a push for natural gas vehicles. It will also highlight the best and most practical applications available today, including light-, medium-, and heavy duty vehicles available from manufacturers and the sales/service channels that support them. The workshop will also take a look at fuel station design, development and ownership and operations options. Attendees will also get a chance to hear about the tax credits, grants, and other incentives available to organizations looking to transition to natural gas. Finally, the workshop will feature experiences and tips from natural gas vehicle fleet operators, and highlight the steps towards implementing a successful natural gas vehicle program.

Workshops are underwritten, in large part, by NGV America and their natural gas vehicle, equipment, and service company members. This allows us to offer these educational events at low registration fees. Proceeds that may be generated from these events are donated to the co-host Clean Cities Coalitions to assist in furthering NGV education.

Registration for this event is \$55 before 7/22 and \$65 on-site. To register, visit <http://www.cleanvehicle.org/workshop/index.shtml>.

## Director's Message

*As we tumble into the heat of the summer we are welcomed to another great season of change. Virginia Clean Cities and our wonderful stakeholders have been busy as bees over these past months reducing emissions and displacing gasoline. We assisted several stakeholders with grant-seeking opportunities, we celebrated program successes, and we welcomed two summer interns from James Madison University to our program.*

*Virginia has been blessed to receive several past Clean Diesel grants from the Environmental Protection Agency. In recent years, EPA has funded propane school buses, natural gas trash trucks, and emissions and efficiency retrofits and repowers. This year, we worked with several stakeholders for natural gas diesel replacements, and to reinvigorate the state's truck stop electrification, as well as to boost the state's Green Operator truck retrofit program. Separately, we collaborated with industry and governments in VA-DC-MD and North Carolina through a Department of Energy opportunity to enhance alt fuels efforts in the four states. Finally, we supported a maritime repower project for major fuel and emissions savings in Hampton Roads. We'll know more in the fall, but the continued federal support for clean air and domestic fuel is encouraging and appreciated.*

*On team changes, we would like to welcome Gwen Murtha and Laura Bryant into our efforts as our summer interns. Both post-graduate students have already made significant contributions to our effort, and both served as volunteer members of our team during the past school year.*

*Thank you for your efforts for another season. We are grateful for all that you do for domestic fuels and clean air in the Commonwealth.*

*Be the change.*



--Alleyn Harned



## National Parks Initiative

Virginia Clean Cities is proud to announce two partnerships with national parks located in the Commonwealth. This is part of a larger DOE program around the country. In June, the U.S. Energy Department and the National Park Service today announced that five national parks around the country will deploy fuel efficient and alternative fuel vehicles as part of an expanded partnership, helping to protect some of America's most prized natural environments.

Virginia Clean Cities will be working with Shenandoah National Park and the Blue Ridge Parkway. Shenandoah National Park plans to partner with Virginia Clean Cities to deploy an all-electric vehicle (EV), a plug-in hybrid EV, and 12 propane lawn mowers. The park also plans to install three EV chargers, two of which will be accessible to park visitors. The Blue Ridge Parkway plans to partner with Virginia Clean Cities to improve its fleet's efficiency by replacing vehicles dating back to 1989 with eight new hybrid vehicles.



## New Natural Gas Engine from Cummins-Westport

The Cummins Westport ISX12 G is a new, larger-displacement natural gas engine for a variety of heavy-duty vehicles, including regional-haul truck/tractor, vocational and refuse applications. The engine has a displacement of 11.9 liters and up to 400 hp (298 kW) and 1450 lb-ft of torque. It also features the same Stoichiometric cooled Exhaust Gas Recirculation (SEGR) combustion technology, spark ignition and Three-Way Catalyst (TWC) after-treatment as the Cummins Westport ISL G engine. The ISX12 G is a dedicated natural gas engine that is based on the Cummins ISX12 diesel engine and operates on low-cost natural gas. The ISX12 G will be manufactured on the same assembly line as the Cummins ISX12 engine. The ISX12 G will meet the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) emissions standards.

## Southeast Propane Autogas Development Program Releases Case Studies

The Southeast Propane Autogas Development Program has recently developed several case studies that highlight some of the successes of the program. These case studies take an in-depth look at fleets that have converted a significant number of vehicles to propane autogas as part of the SPADP program.

The City of Newport News in Virginia expects to save more than \$22,000 in fuel costs each year after converting 22 of their fleet vehicles from gasoline to propane autogas. Not only is the city saving money, they're utilizing a cleaner-burning fuel that's domestically produced.

Lewis Pest Control, a family-owned company based out of Alabama, currently has eight autogas vehicles. The company expects to save \$16,000 in fuel costs annually with their autogas trucks while displacing about 20 tons of greenhouse gases each year.

The Southeast Propane Autogas Development Program is comprised of public and private partnerships throughout 10 southeastern states, Denver and Pittsburgh. Over its four-year span, the Program will work with over 35 public and private fleets to put more than 1,200 clean autogas vehicles on the road and implement more than 35 autogas fueling stations.

To view these case studies, visit the case studies page of the SPADP website at <http://www.usepropaneautogas.com/case-studies/>.



## President Obama Calls for Federal Agencies to Use More Biobased Products

The White House Memorandum "Driving Innovation and Creating Jobs in Rural America through Biobased and Sustainable Product Procurement," directs the federal government to dramatically increase its purchases of biobased products during the next two years.

The initiative is designed to strengthen the economy, create jobs and support business growth. It recognizes that biobased products help U.S. energy security.

"President Obama understands that a strong American economy is tied to a healthy, vibrant rural economy," said Agriculture Secretary Tom Vilsack, who chairs the White House Rural Council. "The actions we are taking will bring new economic investments to our rural communities, to ensure the people who live in these towns have a better, brighter future."

"Biobased products are a natural choice for America and so is the President's call for greater use of them," said USB Director & Domestic Marketing Chairman Lewis Bainbridge, a South Dakota soybean farmer who uses biobased products himself. "A strong federal biobased program also expands opportunities for states, counties and private citizens to buy biobased too."

The Presidential Memo builds on the Congressional support for biobased products established in the 2002 and 2008 Farm Bills. Key provisions in the new Memorandum include requiring federal agencies to include goals and milestones for biobased purchasing, directing a 50 percent increase in the number of new product categories that are designated by USDA as biobased, requiring public reporting of biobased product purchasing, and providing assistance to small businesses to improve the selling of biobased products and services to the federal government.

## Flux Report: Compare Vehicles

The Flux Report is meant to give stakeholders and other interested organizations a quick snapshot of the alternative fuel landscape in Virginia. So far, the Flux Report has featured propane autogas, natural gas vehicles, hydrogen, electric vehicles, and biodiesel. The latest focus is a comparison of different fuels throughout a particular OEM vehicle lineup. We hope that you find this and all further Flux Reports helpful and we look forward to releasing more in the future! You can view all Flux Reports at [www.vacleancities.org](http://www.vacleancities.org).

## New and Renewing Stakeholders



Huntington Ingalls Industries (HII) designs, builds and maintains nuclear and non-nuclear ships for the U.S. Navy and Coast Guard and provides after-market services for military ships around the globe. For more than a century, HII has built more ships in more ship classes than any other U.S. naval shipbuilder.



Werres has been a leading supplier of materials handling distribution products and services since 1935. Servicing both federal government and commercial customers, Werres is a leader in task oriented electric vehicles in the Commonwealth.



Phillips Energy, Inc. serves as a full energy service provider to commercial and residential customers in the upper Tidewater area of Virginia with specific focus on the Gloucester, Mathews, York County and Williamsburg areas. Phillips was Virginia's first public fueling station to offer four alternative fuels.

*If you are not a member and would like to consider membership, please visit our membership page at [www.vacleancities.org/get-involved/join-us/](http://www.vacleancities.org/get-involved/join-us/)*

## Upcoming Events

- 7/10- Malloy Ford Propane Demo Event, Winchester, VA
- 7/11- Old Dominion NAFA Meeting, Colonial Heights, VA
- 7/25- [Compelling Case for Natural Gas Workshop](#), Richmond, VA
- 8/7- Natural Gas Working Group Policy and Funding Call
- 10/18- Alternative Fuel Odyssey Day

*Please visit [www.vacleancities.org](http://www.vacleancities.org), or contact Ryan at [rcornett@vacleancities.org](mailto:rcornett@vacleancities.org) for the latest information about all Virginia Clean Cities Events.*

## Contact Us

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# The Flux Report™

Honda Civic Edition, 2012



**Civic Hybrid**  
**5.71¢ per mile**

(2012 Honda Civic Hybrid, 44city/44hwy)  
\$3.37 per gallon

**Civic CNG**  
**4.93¢ per mile**

(2012 Honda Civic Natural Gas, 27city/38hwy)  
\$2.13 per gas gallon equivalent

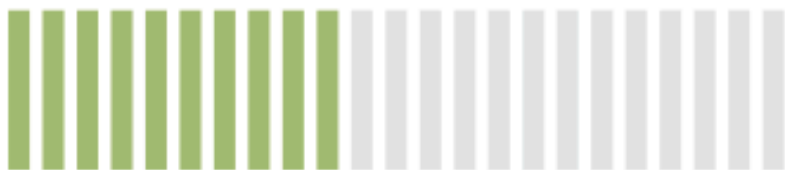
**Civic HF**  
**7.25¢ per mile**

(Honda Civic High Fuel Economy, 29city/41hwy)  
\$3.37 per gallon

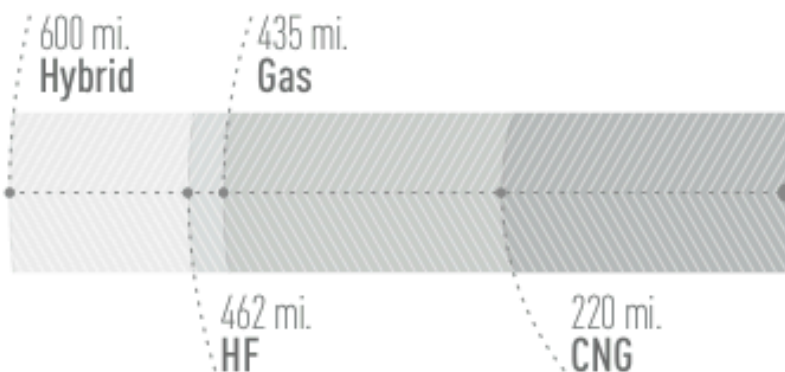
**Civic**  
**7.86¢ per mile**

(2012 Honda Civic Sedan, 28city/36hwy)  
\$3.37 per gallon

## Costs per mile of different Honda Civic models



## Cruise ranges of Civic models



Assumes 55% city & 45% highway driving. Source: DOE, Alternative Fuels & Advanced Vehicles Data Center, Honda