





Stakeholder Newsletter 2013 Volume 5- September

Inside This Issue

Propane School Bus Offerings 1
Question of the Month 2
VML Conference 2
Upcoming CNG Events 2
PEV Community Readiness 2
EV Tax Credit 2
AFM EV Working Group 3
Workplace Charging Challenge 3
Station Locator Webinar 3
Biogas to CNG Webinar 3
Argonne Internship 4
VCC in the News 4
New and Renewing Stakeholders 4

Diamond and Platinum Level Stakeholders



Upcoming Events

























New Propane School Bus Offerings

As school systems throughout the Commonwealth seek to find innovative ways to save money, while still providing a high level of service, several new alternative fuel options are being offered to reduce their fuel costs while reducing dangerous emissions that can be harmful to children. One of these options is propane. Propane has significant cost and emissions advantages over gasoline, and more and more vehicle options are rolling out.

Last month the <u>Propane Road Tour</u>, sponsored by Blue Bird and ROUSH CleanTech, raised awareness of propane autogas as a clean, safe and efficient

alternative fuel that is more cost-effective to operate than diesel. The school bus tour began at Blue Bird's facility in Ft. Valley, Ga.,



and traveled over 1,000 miles to Student Transportation of America's new terminal in Omaha, Neb. The bus that made the journey was the final bus to be delivered from the largest single order of 434 propane autogas buses for Omaha Public Schools.

Atha Comiskey, executive director of Middle Tennessee Clean Fuels, spoke during the tour stop in Nashville. "The advantages of propane as an alternative fuel include its domestic availability, performance, safety and clean-burning qualities," said Comiskey. "They are a good choice for many fleet applications, obviously school buses, but also shuttle buses, taxis and trucks."

At the School Transportation News Expo in Reno, Nev., <u>Blue Bird</u> unveiled the industry's largest

propane autogas fuel tank developed by ROUSH CleanTech. At 98 gallons, the new tank option provides school districts with significantly greater travel range. Blue Bird's Propane-Powered Vision is the nation's most popular and fastest growing alternative fuel school bus.

Thomas Built has also recently released it's new Type C Propane school bus, the Saf-T-Liner C2 bus. These buses have a capacity of up to 81 passengers and are powered by an 8.0 liter V-8 LPG engine by Powertrain Integration with a fully-integrated liquid propane injection system.

The roster of school districts switching to propane autogas is growing across the U.S. In Arizona, Mesa Public Schools operates the largest propane autogas bus fleet in their state and saves \$6,500 in fuel costs per bus per year. Indiana's Tippecanoe School Corporation pays 70 percent less to fuel their propane autogas buses compared to their diesel buses. In Georgia, Hall County Schools saved \$260,000 this past school year in fuel costs alone thanks to their propane autogas school buses. Here in Virginia, systems like Gloucester, and Spotsylvania Counties have made the switch and are reporting positive results.

The cost of a gasoline-gallon equivalent of propane is generally less than that of gasoline, so driving a propane vehicle can save money. In addition, propane is the most accessible of all alternative fuels. In the United States approximately 3,000 publicly accessible facilities offer propane. Propane fueling infrastructure is also easily installed and relatively low-cost. With so many vehicle options and the prevalence of fueling, making the switch has never been easier.

Approximately 85% of all propane used in this country comes from domestic sources, so driving a propane vehicle can help reduce U.S. dependence on imported oil and strengthen national energy security. For more in formation about these propane options, visit our website at www.vacleancities.org.

FUELING CLEAN TRANSPORTATIOI

Clean Cities Question of the Month

Question of the Month

Where can I find case studies and other information about fleets that have successfully adopted alternative fuels and advanced vehicles?

The AFDC Case Studies search is a great resource for examples of what real fleets are doing related to alternative fuels. This page allows the user to search by category or keyword. Categories include fuels and technologies, such as biodiesel and idle reduction, as well as applications such as law enforcement and public transit. The Case Study search functionality was recently updated to provide a better search experience, so be sure to check it out.

Another useful tool is the AFDC Publications database. The publications database includes more detailed reports and case studies written by the national laboratories and other organizations regarding the implementation of alternative fuels and advanced vehicles in fleets. This page is also searchable by category or keyword.

The Clean Cities YouTube Channel is one of the newest Clean Cities tools. The channel features more than 200 case study videos, including MotorWeek Clean Cities Success Story segments, and other educational media for fleets. In addition, Clean Cities Now includes a "Fleet Experiences" section in each biannual publication. Each "Fleet Experiences" article contains information about a fleet that has successfully transitioned their fleet to alternative fuels.

Some industry association websites also contain useful case studies that focus on the use of specific fuel and technology types. For example, the National Biodiesel Board "Market Segments" page provides examples of fleets using biodiesel in different applications, as well as stories on several "feature fleets." Additionally, fleet publications such as Automotive Fleet and Green Fleet publish articles about fleets that are adopting alternative fuels and advanced vehicles.



Alternative Fuels Data Center

Virginia Municipal League Conference

The 2013 Virginia Municipal League Annual Conference will be held October 13-15 in Arlington County at the Marriott Crystal Gateway. The conference will feature educational programs relevant to many of the issues confronting local elected officials across the state. U.S. Sen. Mark Warner, recently appointed to chair the Senate Subcommittee on Surface Transportation and Merchant Marine Infrastructure, Safety and Security, has been invited to address the Monday general session. John Martin, the president of the Southeastern Institute of Research, Inc. and the co-founder of the Boomer Project, will give the keynote address at the Tuesday general session.

Virginia Clean Cities will be at the conference representing the work of the Southeast Propane Autogas Development Program, and the benefits that autogas can bring to local government fleets. For for more information and to register, please visit the event website.



Upcoming CNG Events and Training Opportunities

Virginia Clean Cities is happy to announce a couple of upcoming opportunities to learn about compressed natural gas and how your fleet can start seeing the benefits of a cheaper, cleaner fuel today!

On September 18th, VCC will be teaming with Truck Enterprises in Chesapeake to educate fleets about compressed natural gas options for medium- and heavy-duty applications.

On the week of September 30th-October 4th, the Advancing Fuel Markets project will be hosting a comprehensive CNG training and certification class with TFC Recycling in Chesapeake.

For more information about these events, visit our website at www.vacleancities.org

Electric Vehicle Readiness Scorecard

Clean Cities develops a wide variety of tools to help fleets, fuel providers, and consumers find ways to adopt alternative fuels, advanced vehicles, and fuel economy improvements. The newest tool, the PEV Community Readiness Scorecard, recently launched to help local and regional leaders assess their communities' readiness for the arrival of plug-in electric vehicles (PEVs). The Scorecard is a detailed, interactive online tool that collects information about a community's PEV readiness, provides feedback on its progress, and offers guidance for improvement.

"There's a significant amount of thought and effort involved in shepherding these new technologies into our communities, and the Energy Department saw a real need to provide some interactive blueprints," said Mike Simpson of the National Renewable Energy Laboratory.

PEV readiness requires collaboration among dozens of stakeholders, including utilities, charging equipment manufacturers, vehicle dealerships, metropolitan planning departments, electrical contractors, and community organizations. The PEV Scorecard helps them make sense of the necessary steps and tracks their progress along the way.

Housed on the Alternative Fuels Data Center, the PEV Scorecard walks users through a variety of PEV readiness topics, including permitting and inspection processes for charging equipment installations, incentives and promotions, education and outreach, coordination with utilities, likely PEV adoption rates, and long-range infrastructure planning. Within each topic, users answer a series of questions related to their level of preparation. They receive scores for each topic, ranging from "Needs Improvement" to "Excellent." The tool then provides customized recommendations, resources, and case studies to help communities raise their

Once a community begins its assessment, multiple representatives can return as often as needed to make updates and track progress. Each community is encouraged to designate a central point of contact who coordinates their input.

To use the tool, go to www.afdc.energ.gov/pev-readiness. To learn more about VCC's efforts to advance PEVs in the Commonwealth, go to virginiaev.org or contact Michael Phillips at

2013 Volume 5

Qualified Plug-in Electric Drive Motor Vehicle Tax Credit

The U.S. Internal Revenue Service (IRS) administers a tax credit for the purchase or lease of a new plug-in electric vehicle (PEV). To qualify, the vehicle must draw propulsion from a battery with at least 4 kilowatt hours (kWh) of capacity, use an external source of energy to recharge the battery, have a gross vehicle weight rating (GVWR) of less than 14,000 pounds, and meet specified emission standards. The vehicle must be manufactured for use on public streets, roads, and highways, and may not be an aftermarket conversion. The credit amount ranges from \$2,500 to \$7,500 based on the vehicle's battery capacity and GVWR. The IRS uses these criteria to determine which vehicles qualify for the credit as well as the exact credit amount and posts this information on the Qualified Vehicles Acquired After 12-31-2009 website, www.irs.gov/Businesses/Qualified-Vehicles-Acquired-after-12-31-2009.

To be eligible, a vehicle must be intended for use primarily in the United States and may not be purchased for resale. As noted above, both leased and purchased vehicles may qualify for the credit. However, in the case of a lease, only the lessor and not the lessee is entitled to the credit. The leasing company can decide whether and how it would like to pass along this cost savings to the leasing entity or individual.

The taxpayer claiming the credit must be the first user of the vehicle. However, according to the IRS, if the vehicle has been used as a "demo" car by a dealership, the purchaser or leaser of the vehicle will be considered the first user and should be eligible as long as the vehicle has not been previously titled.

To file for the tax credit, an individual or business must complete IRS Form 8936 and attach it to their federal tax return. The credit is not available as a rebate at any time during the year. To find the most up-to-date version of the form, applicants can conduct a search at www.irs.gov/app/picklist/list/formsInstructions.html. For specific questions about eligibility and filing, consult a qualified tax professional or contact the IRS (800-829-1040) before making any tax-relate decisions

For more information, contact Alleyn Harned at aharned@vacleancities.org.

Advancing Fuel Markets Electric Vehicle Working Group

Virginia, DC and Maryland are working together to construct a working group to discuss electric vehicle market development, outreach, safety and training initiatives, barrier reduction and policy. Together we hope to advance the cleaner domestic fuel market in the region. This is one of several working groups associated with the DOE Clean Cities Advancing Fuel Markets grant.

Please contact Michael Phillips at mphillips@vacleancities.org with any questions or to register for the working group.



Workplace Charging Challenge

The Department of Energy is inviting employers to assist in the deployment of plug-in electric vehicles (PEVs) by providing charging for employees at the workplace.

In January, DOE launched the Workplace Charging Challenge, with a goal to increase the number of US employers offering workplace charging by tenfold in the next five years. DOE is inviting employers across the country to join in the effort by signing the Workplace Charging Challenge Pledge. So far, 29 employers have signed onto the challenge as "Partners", committing to develop a plan for workplace charging in at least one major operational location Ten additional stakeholder organizations have signed on as "Ambassadors", pledging to support and promote workplace charging across the nation.

For more information about the Workplace Charging Challenge, visit the Department of E n e r g y 's w e b s i t e a t electricvehicles.energy.gov or contact Michael Phillips at mphillips@vacleancities.org.

AFDC Station Locator Webinar

A webinar on the Alternative Fueling Station Locator has been scheduled to take place on Thursday, September 19 beginning at 4pm ET. The webinar will last one hour and will include time at the end of the presentation for Q&A.

Presenters will include Andrew Hudgins from the National Renewable Energy Laboratory, and Alexis Schayowitz from ICF International.

During this webinar, you will learn how to use the Alternative Fuels Data Center (AFDC) Fueling Station Locator, including how to search for a station, identify stations along a route, download data, and find current and historical station counts. The presentation will also cover the Fueling Station Locator data collection methodologies, review recent changes to the tool functionality, and point out new fuel-specific fields. To sign up for the webinar, visit https://www.mymeetings.com/nc/join/.

Biogas to CNG Webinar

The Sustainable City Network will be hosting a FREE one-hour webinar on September 5th that will describe how municipalities and commercial enterprises around the world are converting biogas from wastewater treatment plants, landfills and organic waste into fuel for their light-duty and heavy-duty CNG fleets. The webinar will show you how this waste-to-vehicle-fuel system works and provide a number of case studies from across the country.

Unison Solutions systems have been installed globally at landfills, wastewater treatment facilities, dairies and food processing plants. Whether you're an engineer, a public works director, a plant manager, or an administrator who just wants to understand the possibilities, this overview will answer your questions in an informative, consultative format.

To sign up for this event, please visit the Sustainable City Network website at http://www.sustainablecitynetwork.com/



2013 Volume 5

FUELING CLEANTRANSPORTATION

VCC Staff Updates



Brandon Walraven is joining Virginia Clean Cities as a student intern for the 2013-14 academic year. Brandon is a senior at James Madison University and is completing a degree in Integrated Science and Technology with a focus on sustainable development from both energy and environmental perspectives.

Brandon's interest in sustainability first began while studying ecology as a biology student, and since joining the ISAT program he has participated in several sustainability projects including student research at James Madison and a study abroad program in Malta. Brandon is excited to learn more about current alternative fuel technologies and working to increase their usage both in Virginia and across the nation.

Clean Cities offers internships through the Clean Cities University Workforce Development Program, which unites Clean Cities coalitions across the country with students interested in changing the future of on-road transportation. Each year, students in the program work with Clean Cities coalitions to increase awareness of alternative fuels and advanced vehicle technologies and their potential for petroleum reduction. Interns work with coordinators and stakeholders in the community to plan events, analyze data, research markets, design websites, and promote initiatives through social media and public relations.

The Clean Cities University Workforce Development Program is managed by Argonne National Laboratory.

VCC in the News



CNG for GRTC Buses and Richmond Airport Shuttles

Greater Richmond Transit Company (GRTC) buses and the Richmond Airport shuttles are being converted to compressed natural gas (CNG) in the state of Virginia. GRTC just received its first 8 buses and 15 vans, and will have another 21 buses and 15 vans next year. They're replacing the entire 155 bus fleet as the buses need to be retired, for three reasons.

GRTC Chief Operating Officer explained that "the cost savings for the fuel, secondly the environmental benefits from that, and also noise reduction." Richmond International Airport also just replaced 9 shuttle buses with new CNG shuttles, wrapped in tourism promotions, and built a pumping station to fuel them. Said Troy Bell with the Richmond International Airport, "We had a natural gas line from the City of Richmond that happened to run right through where the station was built."

CNG is expected to cut greenhouse gas emissions from the buses by more than 20%, and nitrogen oxide by more than 80%. "It's a much cleaner burning fuel," explained GRTC Director or Maintenance Gerald Brink. "There are no particulates."

And while GRTC and the Airport have invested in the cost of new buses and fueling stations, they expect to save about a dollar a gallon over diesel. Said Bell of the Airport shuttles, "We could see cost savings perhaps amounting to \$25,000 or \$50,000 a year."

New and Renewing Stakeholders



Papco is a leader in petroleum marketing and distribution. PAPCO markets fuel to a broad customer base of fuel users in the Southeast and Mid-Atlantic regions.



Jones and Frank has emerged as a leader in alternative fuels by providing solutions to the many unknowns and unanswered questions surrounding this leading edge technology.



Williams Mullen has over 250 attorneys in 10 offices across North Carolina, Virginia and Washington, D.C. Depending on your needs, attorneys from any of their offices can be called on to help you.



Clean Energy is the largest provider of natural gas fuel for transportation in North America and a leader in the expanding natural gas vehicle fueling market.



Stafford County has been a crossroads for many important events and travelers in history. Stafford will be celebrating it's 350th anniversary in 2014.



Cummins Atlantic is a corporation of complementary business units that design, upfit, distribute, and service electric power generation systems, engines, and related technologies, including fuel systems, controls, air handling, filtration, and emissions solutions.

If you are considering becoming a stakeholder, please visit our membership page at www.vacleancities.org/get-involved/join-us/.

Upcoming Events

9/10: LPG Stakeholder Call

9/18: Medium- and Heavy-Duty CNG Workshop, Chesapeake

9/24: EV Charging Event, Charlottesville

9/20-10/4: CNG Training and Certification, Chesapeake

10/8: CNG Stakeholder Call

9/28: Plug-In Day, Harrisonburg, VA

10/13-15: VML Conference, Arlington, VA

Please visit <u>www.vacleancities.org</u> for the latest information about all Virginia Clean Cities events.

Contact Us

Alleyn Harned, Executive Director

540-568-8896 aharned@vacleancities.org

Ryan Cornett, Outreach Coordinator

540-568-5586 rcornett@vacleancities.org

2013 Volume 5