PITTSBURGH REGION CLEANIGHTLES

PRCC GAZETTE

"DRIVING THE WAY TOWARD ENERGY INDEPENDENCE"

Volume 4, Issue 15 July 2016

DEP rebates for alternative fuel vehicles still available in Pennsylvania

July 1, 2016. The Department of Environmental Protection is reminding Pennsylvania car buyers of rebates to assist with the cost of purchasing a new alternative fuel vehicle. "Rebates are available for battery electric vehicles, plug-in hybrid electric vehicles, and alternative fuels like natural gas and fuel cell vehicles," said DEP Acting Secretary Patrick McDonnell. "These vehicles are helping to reduce climate change causing emissions and are a part of a sustainable Pennsylvania."

These rebates are funded by the Alternative Fuels Incentive Grant Program, which is supported by a gross receipts tax on utilities. To qualify, the vehicle must be registered in Pennsylvania, operated primarily in-state, and be purchased no more than six months before the rebate application is submitted. Rebates are available for new cars only. Large-battery vehicles are eligible for a rebate of \$2,000 (examples include models such as the Nissan Leaf, Ford Focus, Chevy Volt, and similar models from BMW, Volkswagen and Tesla).

Issue Contributors:

Rick Price, Executive Director/Coordinator, PRCC Jan Lauer, President, PRCC Kristie Kubovic, Shale Media Group

PITTSBURGH REGION CLEAN CITIES

C/O Rick Price, Executive Director/Coordinator 1436 Royal Park Blvd South Park, PA 15129 www.coordinator@pgh-cleancities.org

DEP is also offering rebates of \$1,000 for plug-in hybrid electric vehicles and battery-electric vehicles (examples include the Hyundai Sonata, Ford C-Max Energi, BMW x5, Volvo XC). Rebates of \$1,000 are also being offered for natural gas, propane, hydrogen or fuel-cell vehicles, such as the CNG powered Honda Civic or any new CNG powered car or pickup truck. CNG original equipment, manufacturer retrofits, or certified conversions to CNG or propane are also eligible for the \$1,000 rebate. A \$500 rebate is available for electric motorcycles and scooters.

There are only a limited number of rebates available at \$2,000. The rebate program offered will be reassessed upon payment of the first 250 rebates at \$2,000 or Dec. 31, 2016, whichever occurs first.

The program provides rebates to consumers for the purchase of new plug-in hybrid, plug-in electric, natural gas, propane and hydrogen fuel cell vehicles. Leased vehicles are not eligible to receive a rebate.



"Becoming a better steward of our environment is a priority for Nestlé Waters," said Bill Ardis, national fleet manager for Nestlé Waters North America. "We've been running propane autogas vehicles since 2014. Because of the proven emissions reductions and cost savings, we knew it was the right choice to expand our fleet with this domestically produced alternative fuel"

CALENDAR OF EVENTS

BOARD OF DIRECTOR MEETING SCHEDULE FOR 2015

The PRCC Board of Directors meeting schedule is as follows:

October 5, 2016

All meetings will be at:

Five Star Development Inc.

1501 Preble Ave.

Pittsburgh, PA 15233

Starting at 9:30 AM

Upcoming Events

Odyssey Day October 2016 TBD

Training Classes

The PRCC is working with the National Alternative Fuels Training Consortium and the Community College of Allegheny County – West Hills Center to conduct training classes. These classes are free to Sustaining Members

Light Duty Natural Gas Vehicles ATE-115-WH85 1.CEU TBD

Introduction to Hybrid Electric Vehicles Training ATE-136-WH85
1.0 CEU
TBD



To register for these classes go to https://ccaccentral.ccac.edu/WebAdvisor/Web

or contact Bob Koch at 412-788-7378 or rkoch@ccac.edu





Two National Companies Deploy Propane Autogas Trucks

Bimbo Bakeries USA and Nestlé Waters North America recently deployed new fleets of propane autogas delivery vehicles that will service multiple cities across the U.S.

Nestlé Waters added more than 150 new Ford F-650 delivery vehicles to its existing propane autogas fleet. Bimbo Bakeries USA purchased 84 new, clean-burning Ford F-59 trucks.

"This initiative is the latest in our company's continued effort to reduce our carbon footprint," said Gary Maresca, senior director of fleet services for Bimbo Bakeries.

By operating propane autogas delivery trucks equipped with ROUSH CleanTech's fuel system technology, both companies will cut carbon dioxide emissions in local communities by about 192,000 pounds per truck (compared to gasoline) per year. In addition to reducing the emissions of harmful greenhouse gases, Bimbo Bakeries and Nestlé Waters also anticipate fuel and maintenance savings.

The new Ford F-59 and F-650 delivery vehicles will replace older diesel models.

Propane autogas is a nontoxic, non-carcinogenic and non-corrosive fuel. The Environmental Protection Agency classifies the fuel as a non-contaminant. It is the leading alternative fuel in the United States and the third most commonly used vehicle fuel, following gasoline and diesel. About 23 million vehicles travel worldwide with propane in their fuel tank.

Driving Detroit Students in Propane Autogas Buses

Detroit Public Schools students are riding to and from school in cleaner-operating buses fueled by propane autogas. The 35 alternative-fueled Blue Bird Vision Propane buses lower costs while improving the environment by reducing Detroit's carbon footprint.

This is the largest fleet of propane autogas school buses in the state of Michigan.

"The use of propane autogas school buses is a step in the right direction to significantly decrease vehicle emissions and improve the air quality for our students. This also provides opportunities for students and the community to observe and learn first-hand about alternative transportation technologies," said James Minnick, executive director of DPS Office of Student Transportation. "This environmentally friendly green initiative has also resulted in having a bus fleet that is 30 percent brand new." ABC Student Transportation, Detroit Public Schools' transportation provider, chose buses fueled by propane autogas because of the buses' advanced technology, environmental benefits, and fuel and maintenance cost reductions, according to ABC Student Transportation president Charlie Grant.

The bus fleet will emit 12,445 fewer pounds of nitrogen oxide and 111 less pounds of particulate matter each year compared with the diesel buses they are replacing. Propane autogas also reduces hydrocarbon emissions and virtually eliminates particulate matter, when compared with conventionally fueled school buses.

Historically, propane autogas costs about 50 percent less than diesel per gallon and reduces maintenance costs due to its clean-operating properties. Currently, ABC pays 74 cents per gallon for propane autogas compared with around \$3.00 per gallon for diesel.

Propane autogas is the most commonly used alternative fuel in the nation and worldwide. Vehicles fueled by autogas comply with the same safety standards as their conventionally fueled counterparts.

New Compressed Natural Gas Station Opens in Greensburg, PA

June 28, 2016.

U.S. Gain, the compressed natural gas (CNG) division of U.S. Venture, Inc. announced the opening of a new CNG station in partnership with Export Fuel Co., Inc. The GAIN® Clean Fuel – Export Fuel CNG station is located at 1564 Roseytown Rd. in Greensburg, Pennsylvania.

"We're happy to be able to partner with Export Fuel to increase the number of CNG stations serving Pennsylvania," said Bill Renz, U.S. Gain general manager. "Everyone at Gain and Export Fuel recognizes the environmental benefits and cost savings of using compressed natural gas. It's important to make this fuel source available to more operators across the U.S."

"In today's competitive business climate, fleet truck operators are demanding that they be able to operate at peak efficiency," said Kristen Zawoyski, operations manager at Export Fuel. "Many carriers are converting to CNG to get that competitive edge and we want to be part of that equation."

Similar to other GAIN® Clean Fuel stations, the GAIN – Export Fuel co-branded station in Greensburg will feature easy-access, fast-fill capabilities. It also accepts fleet cards for truck convenience, has proven reliability to ensure that fleets have a consistent fuel source and is open to the general public.



Bob Beatty "O"Ring CNG speaks to attendees





Ribbon Cutting

First Customer





Rich Morchesky Export Anne Baker GAIN

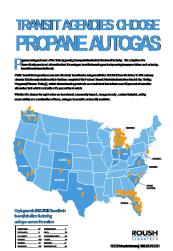
Export Fuel

ROUSH

Transit Industry Responds to Growing Demand for Alt. Fuel Systems

When school districts adopt propane autogas buses, everyone—students, parents, and educators—benefits. More than 500 school districts across North America have deployed school buses fueled by clean, cost-effective autogas in recent years.

Now transit agencies are adding this alternative fuel into their existing fleets. To date, almost 700 propane autogas shuttles transport passengers in 12 states, with the highest concentration in Michigan. This map provides an overview of additional deployments around the nation.





The Altoona-approved ROUSH CleanTech Ford E-450 cutaway chassis affords transit agencies the ability to take advantage of Federal Transit Administration funding, which covers 85 percent of the entire alternative fuel vehicle cost, with a 15 percent local match.

Florida's Broward County Transit tops the charts with the largest autogas transit fleet in the U.S., followed by Michigan's Flint Mass Transportation Authority. The Flint agency's autogas shuttles have chalked up over 9 million miles in the past few years. The agency reports \$2 million in fuel and maintenance cost savings compared with diesel vehicles.

Pittsburgh Region Clean Cities Has a New Website

Pittsburgh Region Clean Cities has a new and improved website! Come check out some of our new features including a vehicle cost calculator. You can meet our team, learn how to become a member, and much more. http://pgh-cleancities.org/



Electric charging stations approved for site of new hotel

The Hilton Garden Inn being built along Pratt Drive in White Township will also feature electric vehicle charging stations when developers open the doors to their first guests later this year.

Hospitality Asset Management Company recently installed electric vehicle connections at its hotel along College Avenue in State College. Managers there said they see it as a way for guests to customize their stay and make traveling easier.

For Indiana this is yet another non-gasoline or diesel option with the anticipated public compressed natural gas connection at the IndiGO facility along Rose Street in White Township. Construction is expected to start next year.

At the Hilton Garden Inn, the electric hookups will be for guests only.

A company spokeswoman said Wednesday the hotel is expected to be completed in September. There will be one Tesla connector that only charges Tesla model vehicles and a GE Watt Station with a universal J1772 connector that can charge all electric vehicles.

As with mobile phones and laptop computers, the actual "charger" is already built into the device — in this case a car. The hookups supply the power.

Cars can be charged by a 120-volt cable through a home outlet.

High-powered, or fast charging, stations are harder to come by. Currently the only fast charge option for Indiana County is at Sheetz along Route 22 in Blairsville. There are charging stations listed on the website plugshare.com (that also operates a popular mobile app) at Mark Arbuckle Nissan in Indiana Borough, the Hampton Inn in White Township and at three county campgrounds.

The Electric Drive Transportation Association reported more than 5.4 million electric and hybrid vehicle and battery sales from 2010 to 2015. About 455,000 of those were all-electric vehicles, according to InsideEV.

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PHOTO: Charging stations like these will soon be installed at the Hilton Garden hotel in White Township. (Submitted photo)



America's Immediate Need for Zero- and Near- Zero Emission Heavy- Duty Vehicles

Article written by Gladstein, Neandross & Associates

Nationwide, on road heavy duty vehicles (HDVs) contribute approximately 50 percent of America's smogprecursor emissions and 20 percent of our transportation related greenhouse gas (GHG) emissions. Heavy duty trucks—primarily used to transport freight and goods—are the second largest and fastest growing segment of the U.S. transportation system for both energy use and emissions of harmful pollutants. Despite significant progress to gradually move towards cleaner alternative fuels such as natural gas, propane, hydrogen, and electricity, America's transportation sector continues to rely heavily on combusting two fossil petroleum fuels: gasoline and diesel. Only a very small, albeit growing, percentage of energy consumed in the U.S. transportation sector comes from alternative or renewable sources. To read for paper go to http://learn.gladstein.org/gamechanger

Question of the Month: What vehicle tire strategies and technologies are available to save fuel?

Answer: It's easy to understand why tires are essential to a vehicle, but tires also play an important role in your vehicle's fuel economy. Tires affect resistance on the road and, therefore, how hard the engine needs to work to move the vehicle. By maintaining proper tire inflation or investing in low rolling resistance or super-single tires, you can improve your vehicle's fuel economy. Whether you drive a light-duty vehicle (LDV) or heavy-duty vehicle (HDV), there is a tire strategy or technology to help you increase your miles per gallon (mpg).

Proper Tire Inflation

Properly inflated tires increase fuel economy, last longer, and are safer. Oak Ridge National Laboratory estimates that you can improve your gas mileage by up to 3.3% by keeping your tires inflated to the proper pressure. In fact, under-inflated tires can lower gas mileage by up to 0.3% for every one pound per square inch drop in pressure in all four tires. It is especially important to keep an eye on tire pressure in cold weather because when the air becomes cold, the tire pressure decreases.

You can find the proper tire pressure for your vehicle on a sticker located on the driver's side doorjamb or in the owner's manual. Also, check to see if your vehicle is equipped with a tire pressure monitoring system (TPMS), which will illuminate a dashboard light when the tire inflation, in one, multiple, or all tires reaches a certain pressure threshold. Fleet managers, in particular, may consider using telematics with a TPMS to assist their drivers with maintenance. Even if a vehicle has a TPMS, however, it is still good practice to manually check your vehicle's tire pressure in order to ensure all of your tires are properly inflated.

Low Rolling Resistance Tires

Rolling resistance is the energy lost from drag and friction of a tire as it rolls over a surface. This phenomenon is complex, and nearly all operating conditions can affect how much energy is lost. For conventional and hybrid electric passenger vehicles, it is estimated that about 3%-11% of their fuel is used just to overcome tire rolling resistance, whereas all-electric passenger vehicles can use around 22%-25% of their fuel for this purpose. For heavy trucks, this fuel consumption can be around 15%-30%.

Installing low rolling resistance tires can improve vehicle fuel economy by about 3% for LDVs and more than 10% for HDVs. In LDVs, a 10% decrease in rolling resistance can increase fuel efficiency by 1%-2%. Investing in low rolling resistance tires makes economic sense, as the fuel savings from the use of these tires over the life of the vehicle can pay for the additional cost of the fuel-efficient tires. Most new passenger vehicles are equipped with low rolling resistance tires, but make sure you keep rolling resistance in mind when shopping for replacement tires.

Super-Single Tires

Reducing vehicle drag can provide significant fuel economy improvements. One way HDVs can reduce drag is by replacing traditional dual tires with one super-single tire—also called a wide-base or single-wide. In Class-8 heavy-duty vehicles (see the April Question of the Month,

http://www.eereblogs.energy.gov/cleancities/post/2 016/04/20/vehicle classifications.aspx, for a definition), this can save fuel by reducing vehicle weight and rolling resistance. A super-single tire is not as wide as two tires, so there is a slight aerodynamic benefit as well, further improving vehicle efficiency.

More Information

For more information, see the following pages: Alternative Fuels Data Center:

Low Rolling Resistance Tires (http://www.afdc.energy.gov/conserve/fuel_economy_tires_light.html)

Vehicle Maintenance to Conserve Fuel (http://www.afdc.energy.gov/conserve/vehicle_maintenance.html)

Vehicle Parts and Equipment to Conserve Fuel (http://www.afdc.energy.gov/conserve/equipment.h tml)

FuelEconomy.gov: Keeping Your Vehicle in Shape (http://www.fueleconomy.gov/feg/maintain.jsp



Question of the Month: What is the AFLEET Tool, how can I use it to make decisions about alternative fuels, and what are the recent improvements?

Answer: Argonne National Laboratory's Alternative Fuel Life-Cycle Environment and Economic Transportation (AFLEET) Tool allows you to examine both the environmental and economic costs and benefits of alternative fuel and advanced vehicles (https://greet.es.anl.gov/afleet). By entering data about your light- or heavy-duty vehicle(s), you can estimate petroleum use, greenhouse gas (GHG) emissions, air pollutant emissions, and cost of ownership.

AFLEET uses data from Argonne's Greenhouse gases, Regulated Emissions, and Energy use in Transportation (GREET) model (https://greet.es.anl.gov/index.php) and the U.S. Environmental Protection Agency's (EPA) Motor Vehicle Emissions Simulator (MOVES) model (https://www3.epa.gov/otaq/models/moves/) to estimate life cycle (well-to-wheel) GHG and tailpipe air pollutant emissions. Users can either use the model's default values or get even more accurate results by customizing the tool with their real life vehicle or fleet data. By using AFLEET's simple input mechanism, users can answer questions such as:

What are the emissions savings of replacing a conventionally fueled fleet with alternative fuel vehicles?

What is the incremental cost, and potential return on investment, of buying a flexible fuel vehicle?

How many passenger vehicles will be "taken off the road" by using natural gas refuse trucks?

Fleets and others that have been using AFLEET since its original release in 2013 will be pleased to hear that AFLEET has been updated to reflect more recent emissions data. In addition, Argonne added new features to help users formulate a more complete picture of the costs and benefits of alternative fuels.

Updates include:

Fuel Prices: AFLEET uses public and private station pricing based on the 2015 average Clean Cities Alternative Fuel Price Report data (http://www.afdc.energy.gov/fuels/prices.html). In addition, fuel pricing is now state-based rather than based on a national average. Users may also input a range of fuel prices to determine effects on simple payback models.

Infrastructure Costs: The updated version of AFLEET features data on fueling station and electric vehicle supply equipment infrastructure construction, operation, and maintenance costs. Users may also calculate other infrastructure-related costs, such as public station out-of-route mileage and fueling labor costs.

Latest Vehicle and Emission Data: AFLEET uses the latest GREET 2015 air pollutant emissions data, which includes updated heavy-duty fuel economy and emissions data, data for fuel cell electric vehicles, and updated life cycle data for renewable natural gas. AFLEET has also been updated to use the most recent version of EPA's MOVES data, 2014a.

Externality Costs: AFLEET output data now includes externality costs of national petroleum use and GHG emissions. Externality costs are the indirect damages associated with fuels that are not explicitly captured by the marketplace (e.g., property damages from increased flood risk as a result of climate change). Externality cost estimates will be useful in putting local vehicle and fleet decisions in a national perspective.

For information about and instructions for using AFLEET, refer to Argonne's AFLEET User Guide (https://greet.es.anl.gov/files/afleet-manual).

In addition, check out the Alternative Fuels Data Center's (AFDC) fuel-specific emissions pages for general information on the emissions impacts of the various alternative fuels:

Biodiesel:

http://www.afdc.energy.gov/vehicles/diesels_emiss ions.html

Electricity:

http://www.afdc.energy.gov/vehicles/electric_emiss ions.php

Ethanol:

http://www.afdc.energy.gov/vehicles/flexible_fuel_emissions.html

Hydrogen:

http://www.afdc.energy.gov/vehicles/emissions_hydrogen.html

Natural Gas:

http://www.afdc.energy.gov/vehicles/natural_gas_e
missions.html

Propane:

http://www.afdc.energy.gov/vehicles/propane_emis sions.html

Clean Cities Technical Response Service Team

technicalresponse@icfi.com

800-254-6735

Soap Box Derby in McKeesport, PA









22 CNG Stations in Western PA



SUNOCO Pittsburgh Airport



SUNOCO PA Turnpike New Stanton



Giant Eagle BeechNut



Waste Management Washington

"O"Ring GAIN DuBois



EFUS/GAIN Bentleyville n

Heath Oil Barkeyville



SUNOCO Cannonsbrg

CNG Fuel Shippensville



EQT Strip District

PALO CNG

N o Picture of "O" Ring/GAIN Somerset





Wayne Township Landfill

Bee Green Beemac Baden



Giant Eagle Cranberry

Unimart State College



"O"Ring GAIN Punxsutawney

Cool Springs



Clean Energy Centre County

Export Fuels GAIN Greensburg

PRCC and National Fuel Team Up on Natural Gas Informational Workshops

The Pittsburgh Region Clean Cities and National Fuel teamed up on July 21, 2016 to hold a compressed natural gas workshop at the "O" Ring/GAIN training facility in Brookville, PA. Scott Swartfager (National Fuel) welcomed everyone and set the stage for Why CNG? and Why Now? The informational workshop was to provide information about National Fuels and CNG as well as the DOE Clean Cities and Pittsburgh Region Clean Cities (PRCC) Programs as well to acquire information about the PA Alternative Fuel Incentive Grant Program, PA-AFIG). Presenters included Rick Price, Executive Director of the Pittsburgh Region Clean Cities who talked about the benefits of alternative fuels, training and assistance PRCC and DOE has available, and some of the projects and programs PRCC has or is involved in.

Geoff Bristow (PA-DEP) spoke about the PA DEP AFIG and the Alternative Clean Energy (ACE) Programs. He spoke about the changes this year in the AFIG program and how it could help folks interested in alternative fuels that in the past could possibly not qualifier or justify applying for a grant. He stated one of the main changes was the program was open all year long as has not been the case in the past. Geoff also stated that the ACE Program has awarded close to 50 awards for natural gas stations under this program.



Scott Swartzfager National Fuel



Geoff Bristow PA DEP

Barry Carr (Landi Renzo, USA and a Clean Cities Coordinator of Central New York) was a presenter about options available from OEMs and after market that Landi Renzo, USA serves as well as some of the platforms and models they support. Barry who's area includes Western Pennsylvania also talked about the continued need for service of these vehicles and location to fuel his and many other CNG vehicles.



Barry Carr Landi Renzo USA

Bob Beatty("O" Ring CNG Fueling Systems) spoke about the many CNG stations in the state that he has built and operate some of his own stations as well have built many of the stations in Pennsylvania. Bob talked about the need to work with the local utilities as well as local building inspectors before engaging in building a CNG station and the ability to keep it maintained. He gave a tour of the facility at the end of the workshop.



Bob Beatty "O" Ring CNG

The next day July 22nd, another workshop was held in Erie, PA at the Shiners location on W. 38th St. Most of the same speakers spoke at that workshop except for the Fueling Option portion Dan Hackett (IGS) spoke about what his company is doing about CNG Infrastructure. IGS has a station in Youngstown, OH and other locations. He told folks that the company has many options for them and their business is here to stay, in fact Dan was able to tell the group that IGS had just been awarded an ACE Grant for a CNG station in the Erie area and hopes to have it completed by the 1st or 2nd quarter of 2017. Note! *This will fill in a critical link in western PA for CNG infrastructure*.



Dan Hackett IGS













7th Annual Odyssey Day Coming this October! Watch for our email notice.

PRCC Sustainable Members



PRCC Membership Levels Information

Membership Options: Individual- \$150 Nonprofit- \$300 Bronze- \$500 Silver- \$1000 Gold- \$2000 Platinum/Sponsor- \$4000+

To find out more on membership levels go to:

http://www.pgh-cleancities.org/wordpress/?page_id=367





The Pittsburgh Region Clean Cities Board of Directors would like to thank all of our members and stakeholders for supporting our coalition and mission!



UNITED WE STAND – SEPTEMBER 11, 2001

Our deepest sympathy and heartfelt thoughts go out to our fellow Americans during this time of crises. We will continue to stand strong and united in our support of the men and women protecting our country's interests.

Please come visit our PRCC Web Site: www.pgh-cleancities.org

. Contribute Your News!

In trying to get the news of successes we have in our area. Please feel free to contact Rick Price, Executive Director/Coordinator at 412-735-4114 or at coordinator@pgh-cleancities.org..

Learn more about Clean Cities at *cleancities.energy.gov*, and learn how to get involved with the Pittsburgh Region Clean Cities coalition at www.pgh-cleancities.org

