SOUTHEAST LOUISIANA CLEAN FUEL PARTNERSHIP

PUTTING THE PIECES TOGETHER FOR CLEANER FUEL
A STRONGER ECONOMY - A HEALTHIER COMMUNITY

Clean Fuel Newsletter

May 2015

www.CleanFuelPartnership.org

Upcoming Events

Click Here for Upcoming Webinars

2015 Louisiana Alt. Fuels Conference & Expo
May 21-22, 2015
Baton Rouge, LA
LSU Center for Energy Studies
Click here to register
Contact Lauren Lambert-Tompkins for sponsorship information.

Government Fleet Expo & Conference
June 8-11, 2015
Denver, Colorado
Colorado Convention Center
*Register by May 15 and save $100! Use Promo Code **CLEAN15** to receive **an extra $100** off your Fleet Full Conference Registration*

Natural Gas Vehicles Infrastructure USA
June 18-19, 2015
Atlanta, GA @ Grand Hyatt
ngvevent.com/register.php

Fleet Technology Expo
August 25-26, 2015
Long Beach, California
Long Beach Convention Center
www.fleettechnologyexpo.com

Natural Gas Vehicle Conference & Expo
September 15-17, 2015
Denver, Colorado
Colorado Convention Center
ngvshow.cwcgroupevent.com

New Clean Cities Publications Available!

SLCFP's *Stop Idling, Start $aving* Workshop Aims to Motivate Fleets to Reduce Idling: Fleets looking to reduce their fuel costs may find low-hanging fruit in addressing vehicle idling. At Southeast Louisiana Clean Fuel Partnership's Stop Idling, Start $aving Workshop held on April 23, 2015, representatives from Jefferson Parish's Department of Water, Argonne National Laboratory, Digital Asset Tracking Systems, and the Clean Fuel Partnership shared their experiences and insight to help fleets reduce fuel consumption and costs by addressing vehicle idling. **Read More**

New US Dept. of Energy Publication Builds Case for CNG Fleets: A new publication from the US Dept. of Energy's National Renewable Energy Laboratory (NREL) helps fleets assess the viability of a new CNG vehicle and fueling infrastructure project. **Read More**

Resources for Converting to Propane: Discover resources for calculating the cost of propane as a transportation fuel, identifying available financial assistance & incentives, finding vehicles, conversion kits and fueling infrastructure companies as well as case studies to help you evaluate the potential of propane for your fleet. **Read More**

Save the Date: Clean Fleet Leader Awards!

Each year, the Southeast Louisiana Clean Fuel Partnership recognizes fleets that use alternative fuels and fuel saving strategies in their operations. Fleets that submitted their information for our Annual Report will be recognized at our annual Clean Fleet Leader Awards Ceremony on **July 14, 2015,** at the Regional Planning Commission!

Save the Date!
Tuesday,
July 14th, 2015

10 VETERANS BOULEVARD · NEW ORLEANS, LA · 70124
SLCFP@NORPC.ORG · PHONE 504.483.8500

www.CleanFuelPartnership.org

SLCFP's *Stop Idling, Start $aving* Workshop Aims to Motivate Fleets to Reduce Idling

Fleets looking to reduce their fuel costs may find low-hanging fruit in addressing vehicle idling. At the Southeast Louisiana Clean Fuel Partnership's *Stop Idling, Start $aving* Workshop held on April 23, 2015, representatives from Jefferson Parish's Department of Water, Argonne National Laboratory, Digital Asset Tracking Systems, and the Clean Fuel Partnership shared their experiences and insight to help fleets reduce fuel consumption and costs by addressing vehicle idling. Idling your vehicle truly gets you nowhere - it reduces the fuel economy of your fleet, increases fuel costs and emissions, and wastes nonrenewable resources.

SLCFP Intern Courtney Young presents on reducing light-duty vehicle idling in fleet operations.

Rebecca Otte, Clean Fuel Partnership Coordinator, kicked off the workshop with an overview of the types of vehicle idling and the US Department of Energy's Idle Box toolkit which includes resources to help fleets address idling. The toolkit includes savings calculators, fact sheets, pledge forms, and templates for signs and press releases, as well as IdleBase, a nationwide database of idle-related laws and regulations at state and local levels, including New Orleans' ordinance to limit idling in the City to no more than 20 minutes, with a 10 minute limit in the Garden District and the French Quarter.

Following the overview, Patricia Weikersheimer, Argonne National Laboratory's writer for the National Idling Reduction Network News, discussed various technology solutions to reduce idling such as automatic engine shut-down/start-up systems that turn the vehicle's engine off when it's idling unnecessarily but can restart it based on cabin temperature or battery charge level. Auxiliary power units (APUs) are another option to power air conditioning, heating, electronics, emergency lights and other devices while the vehicle's engine is off. Grant programs that can help offset technology costs include the US Environmental Protection Agency's Clean Diesel Program (funding available at both the national and state level), Congestion Mitigation and Air Quality funding (through Louisiana Department of Transportation and Development) and manufacturer rebate programs.

Courtney Young with the Clean Fuel Partnership then presented on reducing idling in light-duty vehicles, an example of the sample presentations provided in the US Department of Energy's IdleBox toolbox. The presentation highlighted the benefits of reducing idling and can be geared toward drivers. One key detail included in the presentation is that idling for more than 10 seconds uses more fuel and results in the production of more carbon dioxide than stopping and restarting your engine.

Wade Broyles, president of Digital Asset Tracking Systems, Inc. (DATS) followed up by presenting on how their GPS tracking systems can help identify unnecessary idling in fleets as well as provide fleet managers with the data they need to make a case for purchasing idle reduction equipment. Their tracking system and related software includes mapping features to show routes the vehicles travel. Vehicle detail reports include idle time, fuel efficiency and speed. In their experience, the tracking software pays for itself in a year if the fleet is able to decrease idling time by just four minutes a day. The system can also be used to map better routes, reducing vehicle miles travelled and fuel consumption.

Jesse Rosenfeld with Jefferson Parish's Department of Water closed out the workshop with a discussion of their experience with using tracking software to reduce idling. Since installing the software on

82 vehicles, Rosenfeld was able to document a substantial amount of truck idling in the yard. They are endeavoring to address the issue including working with the Clean Fuel Partnership to post signs in the yard to remind drivers to turn off their engines. He also plans on using the data to show the benefits of auxiliary power units for vehicles that require power when the vehicle is stationary such as those with emergency lights. This information will also help him in applying for the Clean Fuel Partnership's Clean Fuel Transition Fund for Public Fleets to help offset the costs of anti-idling equipment.

Additional Resources to Help Fleets Address Idling

PowerPoints from the event have been posted on the Clean Fuel Partnership's Events page under "Past Events" including:

- Idling Reduction Basics For Fleets – presented by Rebecca Otte, Clean Fuel Partnership Coordinator
- Technology Solutions To Reduce Idling in Light and Medium-Duty Vehicles - presented by Patricia Weikersheimer, Argonne National Laboratory's writer for their National Idling Reduction Network News
- One Easy Habit to Help Cut Fuels Costs: Reducing Light-Duty Vehicle Idling – presented by Courtney Young, Clean Fuel Partnership Intern
- Digital Asset Tracking Systems - Fleet Management Solutions – presented by Wade Broyles, President of DATS
- ZeroRPM – Additional information from an idle reduction technology provider

The US Department of Energy's Clean Cities IdleBox toolkit includes a variety of resources for fleets interested in reducing their fuel consumption including:

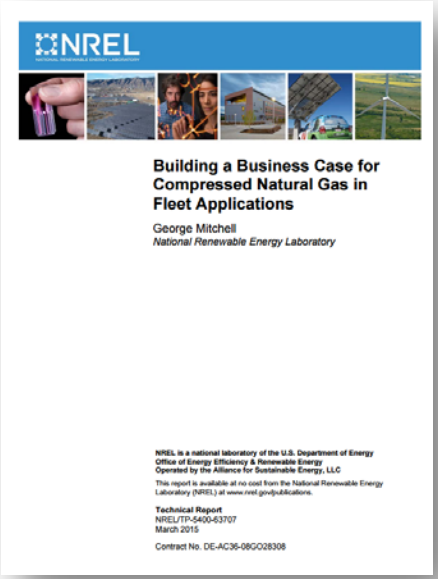
- Idling Reduction Savings Calculator
- Support Idle Reduction Sign
- Templates for idle reduction pledges, press releases and presentations
- Information Resources such as Case Studies and IdleBase – a comprehensive database of idle-reduction regulations

Interested in learning more? Sign up for National Idling Reduction News, a free monthly e-newsletter that provides information about the latest developments in idle reduction, including current funding opportunities.

STOP Idling.
START $aving.

New US Department of Energy Publication Builds Case for CNG in Fleets

A new publication from the US Dept. of Energy's National Renewable Energy Laboratory (NREL) helps fleets assess the viability of a new CNG vehicle and fueling infrastructure project. Compressed natural gas (CNG) has garnered interest as a transportation fuel in part because of its cost savings and price stability compared to conventional petroleum fuels. Building a Business Case for Compressed Natural Gas in Fleet Applications helps fleets assess the cost effectiveness of converting to CNG to determine if it's a good fit for their operations.



The publication details an enhanced version of an online modeling tool developed by NREL—the **Vehicle Infrastructure and Cash-Flow Evaluation (VICE)** model—that helps fleets evaluate the financial soundness of CNG vehicle and CNG fueling infrastructure projects. The tool, VICE 2.0, assists fleets who are interested in buying CNG vehicles and/or building CNG infrastructure.

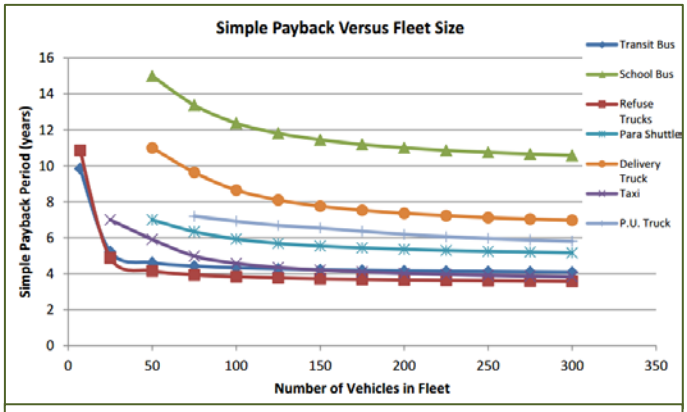


Figure 5 from the NREL report Building a Case for CNG in Fleet Applications: Relationship between fleet size and simple payback period

VICE 2.0 offers users robust visual and reporting tools, including graphic images of return on investment, cumulative cash flow, and payback periods. It also calculates annual and cumulative petroleum displacement and annual greenhouse gas reductions, and displays them based on the fleet's specific attributes. The publication features an overview of VICE 2.0 and the default values for such factors as investment type, tax exemption status for fuel, and operations and incentives for vehicles. In addition, the document addresses profitability and its sensitivity to parameters such as fuel cost and vehicle miles traveled.

Fleets which are well-suited to using CNG, such as those that fuel at a central location or those with high annual vehicle miles travelled, will especially benefit from using the model.

Other resources for fleets considering CNG, including case studies, are available on the Alternative Fuels Data Center and Clean Cities websites.

For more information on the Building a Business Case for CNG in Fleet Applications document or the VICE 2.0 model contact:

Clean Cities Technical Response Service Team
technicalresponse@icfi.com
800-254-6735

Clean Fuel Overview: Resources & Information for Converting to Propane

Propane, also known as liquefied petroleum gas (LPG) or propane autogas, has been used worldwide as a vehicle fuel for decades. Stored as a liquid, propane fueling infrastructure is widespread. The vast majority of propane consumed in the United States is produced domestically and distributed via established infrastructure. Using propane instead of conventional transportation fuels provides convenience and performance benefits, increases U.S. energy security and improves public health and the environment.

Cost of Propane as a Transportation Fuel

Based on the US Dept. of Energy's January 2015 Alternative Fuel Price Report, the Gulf States average cost of propane at private stations was $1.44 per gallon which is comparatively lower than the average cost of gasoline, $1.90 per gallon. Although fleets typically see about a 10% reduction in fuel efficiency with propane, the lower fuel price still results in an overall savings. Additional savings can be realized with fueling contracts and reduced travel time to refuel the vehicles when the station is installed onsite.

Available Financial Assistance & Incentives

A variety of incentives and financial assistance opportunities are available to help fleets convert over to alternative fuels:

- Louisiana offers an **income tax credit** of 50% of the cost of converting a vehicle to an alternative fuel (including propane) or purchasing an alternative fuel vehicle, as well as a 50% credit for alternative fueling equipment.
- The Louisiana Petroleum Gas Commission offers a Commercial Mower & Automobile Incentive with up to $1,500 per vehicle for the purchase of a new propane-powered vehicle or $800 towards the conversion of an existing vehicle. Each fleet can apply for up to 4 incentive awards up to $5,000 total each year.
- The US Environmental Protection Agency's Clean Diesel Program offers grants through a national competition to reduce emissions from diesel vehicles, including converting vehicles to alternative fuels. The national competition is currently accepting proposals through **June 15, 2015**. The Request for Proposals can be found at: www.epa.gov/air/grants/rfp-epa-oar-otaq-15-06.pdf.

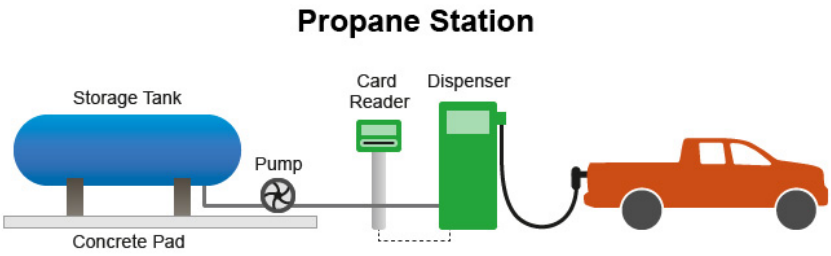
Vehicle & Conversion Information

Propane conversion systems must be **certified by EPA** as compliant with emissions standards. Certifications are specific to vehicle make, model and year. EPA maintains a list of certified alternative fuel conversion systems on their website: www.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm#4.

New vehicle and conversion costs vary depending on company and vehicle. **ROUSH Clean Tech**'s cost estimate of a new Propane F-250 or the conversion of a 2012 or newer F-250 (6.2L engine) is $10,500. **Force 911**'s average cost of conversion is $6,000 ($4,500 for the system and tank, $1,500 for labor). **Alliance Autogas/Blossman Autogas** offers a kit and tank installation costing about $5,600. (Note: Prices from 2014.)

Fueling Infrastructure

Infrastructure availability is a driving force behind the acceptance of any fuel. Fleets depend on being able to locate fuel stations within a reasonable distance at a competitive price. The US Dept. of Energy's Alternative Fuel Data Center (AFDC) includes a Station Locator with the location of public and private propane stations. In addition, the AFDC includes technical information for fleets looking to install propane fueling infrastructure on their site.



The infrastructure needed is very similar to gasoline and diesel refueling equipment. Propane is brought to the site via a delivery truck and put into onsite storage, traditionally above ground. The fueling dispenser is similar to a gasoline dispenser. The difference is that propane is delivered to the vehicle under pressure so it remains a liquid. When the vehicle tank is full, the dispenser stops automatically, just like gasoline dispensers.

As with any fuel, it's important to know the safety guidelines that need to be considered when establishing infrastructure. This includes the National Fire Prevention Association's NFPA 58 Vehicular Liquefied Petroleum Gas Code, which applies to the design and installation requirements of propane refueling facilities. Your local fire marshal can help with this. In addition, your local propane supplier can help determine the right amount of storage needed to adequately meet vehicle fueling needs. Propane fueling systems can be pad mounted and scaled to fit the need of the fleet. The fleet can start with a smaller tank set up when converting a few vehicles over to propane and then exchange the system for a larger size as more vehicles are converted.

Many suppliers offer an inexpensive lease of the tank, pump, and dispensing equipment in return for a fuel supply contract. In these cases, the station owner or fleet is only responsible for the cost of equipment that cannot be removed from the site when the fuel contract expires, such as the electricity line or the concrete pad for the storage tank. This can make the upfront cost of propane infrastructure very affordable. The cost of establishing private infrastructure includes purchasing and installing the necessary equipment for dispensing propane and typically runs from $37,000 to $175,000, but varies based on situation and need.

Local Fleets Currently Using Propane

Several local fleets currently employ propane in their operations. **Airport Shuttle** delivers passengers between the New Orleans International Airport and downtown hotels using propane. By converting their fleet of 31 vehicles to propane, they've saved 332,000 gasoline gallons equivalent (GGE) and reduced 693 tons of greenhouse gases since 2010! **Limousine Livery's** propane fleet includes 9 Sedans, 2 SUVs, 4 vans and 3 limousines. In 2014 alone, they saved 16,866 GGE and reduced 35 tons of greenhouse gases!

Additional Resources

More information for fleets interested in propane for their operations can be found on the US Dept. of Energy's Alternative Fuel Data Center's Propane Section and on the Propane Education Resource Council's Autogas USA website. The Clean Fuel Partnership also created an informational handout on propane for reference.

New Clean Cities Publications Available

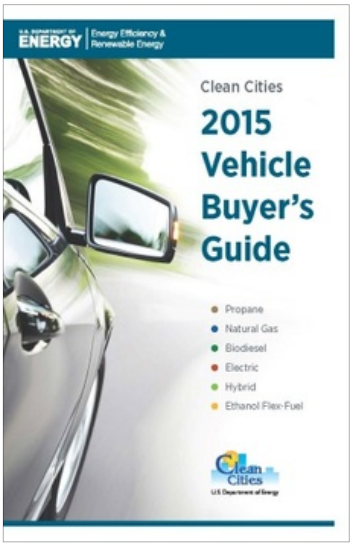
Please Note: Publication notices are provided for informational purposes only. Neither the Southeast Louisiana Clean Fuel Partnership nor the Regional Planning Commission is responsible for the information presented in the announcements, webinars, conferences or publications themselves. Please contact hosts for additional information on specific presentations.

Fuels Fix, produced by the nationwide network of Clean Cities Coalitions, highlights fleets that have successfully executed clean transportation projects and provides technical information and resources for fleets interested in exploring clean transportation options. The **Fuels Fix Spring 2015 Edition** includes articles on:

- **Hollywood Trucks Recieves Environmental Achievement Award in New Orleans**
- CNG Adoption in Northern Louisiana
- Chevrolet Camaro Sets Pace for EcoCAR 3
- Midwest DRIVES Provides Demo Vehicles to Fleets
- CNG Delivers Food for Thought in CA
- Fast Chargers See Fast Growth in Minnesota
- Northern Stars of New England
- Plus much more!

Check out the latest edition of the **Clean Cities Vehicle Buyer's Guide** for information on 2015 line-up of light-duty alternative fuel vehicles including:

- Propane
- Natural Gas
- Biodiesel
- Electric
- Hybrid
- Ethanol Flex-Fuel



The Southeast Louisiana Clean Fuel Partnership is part of a network of almost 100 US Department of Energy-designated Clean Cities Coalitions nationwide. We provide education, technical assistance, funding information and other services to assist vehicle fleet managers and personnel incorporate cleaner transportation options into their operations. For additional information on cleaner transportation options, please visit the U.S. Department of Energy's Alternative Fuels Data Center and Clean Cities websites.