

EVERY™ ALTERNATIVE. News Update

Cummins Westport **NEWS NOTES**

➤ **Look for Cummins Westport at the following upcoming conferences:**

- **Great American Trucking Show** ◇ Aug 21-23 in Dallas, Texas, USA www.gatsonline.com
- **FIGAS** ◇ Aug 21-23 in Lima, Peru www.thaiscorp.com/figas/site/index_en.html
- **Future is Green** ◇ Sept 14-16 in Long Beach, California, USA www.capcoagreen.com
- **Buscon** ◇ Sept 16-17 in Chicago, Illinois, USA www.busconexpo.com/t_home.cfm
- **IAA Commercial Vehicle Show** ◇ Sept 25-Oct 2 in Hanover, Germany <http://www.iaa.de/>
- **APTA (American Public Transportation Association)** ◇ Oct 6-8 in San Diego, California, USA <http://apta.ntpshowsites.com/exhibition.html>

Focus on **SALES & MARKETING**

ISL G Now Available in Sterling® Truck

In May, during the Alternative Fuels & Vehicles Expo in Las Vegas, Sterling® Trucks announced the availability of the CWI ISL G in the Sterling® Set-Back 113 medium-duty truck. For customers looking for reliable & clean power, the Sterling® Set-Back 113 with the ISL G is a perfect choice. For more information, visit www.sterlingtrucks.com.

Clean Alternative for School Bus

The way to school just got better! Blue Bird (www.blue-bird.com) and Thomas Built Buses (www.thomasbus.com) are now offering a clean-burning and dependable alternative fuel option with the addition of the Cummins Westport ISL G natural gas engine to their school bus offering. For more information, visit their websites or contact your local Blue Bird Bus or Thomas Built Buses dealer.

The ISL G is also available for urban transit, refuse, shuttle bus, and pickup and delivery applications. For a listing of equipment manufacturers offering the ISL G, go to www.cumminswestport.com/customer/oem.php

Focus on **SERVICE & TECHNOLOGY**

The Buzz on Biogas

The buzz around alternative fuels that help reduce oil dependence and global warming includes biogas. What is Biogas? Biogas is generated when bacteria degrade biological material in the absence of oxygen, in a process known as anaerobic digestion. Biogas is primarily a mixture of methane (also known as marsh gas or natural gas) and carbon dioxide (CO₂). An example of a biogas would be landfill gas, which is a biogas produced by organic waste decomposing under anaerobic conditions in a landfill. Biogas or landfill gas must be processed/upgraded to remove impurities so that it can be used for commercial applications, such as to fuel a vehicle. Biomethane is the name

given to biogas that has been upgraded to pipeline and vehicle fuel quality.

Why use biomethane? Biomethane is a renewable fuel and offers positive greenhouse gas benefits. It can displace fossil fuel by 100% and doesn't compete with food production. Along with natural gas, biomethane offers a low-carbon option for addressing concerns of global warming, high oil prices and dependence on foreign sources of fuel.

Cummins Westport approves the use of up to 100% biomethane that meets Cummins published natural gas fuel specifications. For more information, go to www.cumminswestport.com/fuels/biomethane.php.

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Focus on **INDUSTRY**

U.S.A. ♦ Over 100 Years of US Natural Gas Supply, Study Says

Washington DC - The American Clean Skies Foundation has unveiled a study of America's natural gas resource base that concludes that America now has over 100 years (and climbing) of natural gas that can be economically produced. The study, which was conducted by Navigant Consulting, found that the federal government has consistently under-estimated the amount of natural gas trapped in unconventional places like shale rock.

After extensive data gathering, the study concludes that the total U.S. recoverable resources amount to 2,247 trillion cubic feet, or 118 years worth of supply at current production levels. "The size of these shale gas deposits is so enormous that they can no longer be overlooked," said Aubrey McClendon, chairman of the American Clean Skies Foundation and chief executive of Chesapeake Energy Corp, the third-largest U.S. natural gas producer. More conservative estimates peg U.S. recoverable natural gas supplies at 1,680 trillion cubic feet, or 88 years of supply. But such estimates ignore the potential of unconventional

gas production from shale, tight sands and coal-bed methane, said Rick Smead, co-author of the report and project manager for Navigant. Forecasts from the U.S. Energy Information Administration "have been significantly outstripped by actual behavior," Smead said.

Shale formations, sedimentary rock found across the United States that makes natural gas, were once uneconomic. But new technology like horizontal drilling and fracture stimulation in recent years have "liberated enormous amounts of natural gas," McClendon said. A conservative estimate for sustainable production from just the "big seven" shale plays is at least 27 billion cubic feet per day -- half of current total natural gas production, Smead said.

For more information, see <http://www.cleanskies.org>

Source: NGV Global, August 1, 2008

Peru ♦ Petroperu Extends Its Network of NGV Stations

Lima - The Peruvian state oil company, Petroperu, will open three new refueling stations for Natural Gas Vehicles (NGV) in Lima. These will join the 426 that currently make up their supply network called Petrored, along with the 21 already in operation.

The inaugurations coincide with the 39th anniversary of the local company and are in line with the state

Source: GNV Magazine.com, July 25, 2008

policy pursued by the change of energy matrix, to counteract the negative effects produced by climate change and improve national development with an energy source of local origin. The goal is for Petrored to have 450 stations by December 2008.

United Kingdom ♦ Successful Liquid Biomethane Production in the UK

London - London-based Gasrec announced that it has begun the production of liquid biomethane fuel at its plant on a landfill site in Surrey, England. Gasrec said it worked on the project with SITA UK, which owns the landfill, and BOC, which provides plant operation and maintenance services. SITA UK is part of Paris-based Suez (OTC: SZEZY), and BOC is a subsidiary of the Linde Group. Gasrec said Linde provided the liquefaction technology for the landfill project.

"Our technology not only captures a highly valuable source of clean fuel for vehicles, but also provides the means for landfill and waste managers to optimize their gas assets fully," said Richard Lilleystone, CEO of Gasrec. "We look forward to working with all sectors of industry as well as local authorities and government to assist in the introduction of low carbon fuels derived from a truly sustainable and secure source."

Gasrec said the Surrey plant is expected to produce approximately 5,000 tonnes of liquid biomethane per year. The company said the project can recover over 85 percent of the methane contained in the raw gas produced from the landfill site. The initial target for the use of liquid biomethane is commercial vehicles operating in the haulage and waste management sectors, according to Gasrec.

Source: Cleantech.com, June 19, 2008