

### Natural gas futures - weekly outlook: September 21 - 25



Investing.com - Natural gas futures slumped to the lowest level in more than three months on Friday, as market players weighed shifting weather forecasts to assess the outlook for U.S. demand and supply levels. On the New York Mercantile Exchange, natural gas for delivery in October dropped 4.7 cents, or 1.77%, to end the week at \$2.605 per million British thermal units. Futures hit an intraday low of \$2.602, the weakest level since June 5. Meanwhile, the November contract slumped 5.2 cents, or 1.91%, to close at \$2.676. For the week, natural gas prices lost 9.7 cents, or 3.27%.

Demand for natural gas is expected to be moderate next week as cooler weather moves across the eastern part of the U.S. Meanwhile, weather in the west will be warmer before cooling off as the week progresses. Summer heat has waned and cooler temperatures beckon with the approach of autumn. Natural gas accounts for about a quarter of U.S. electricity generation.

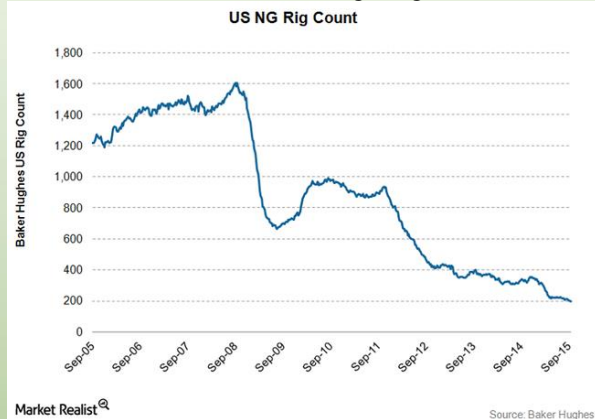
Data released Thursday showed that U.S. natural gas supplies rose broadly in line with market expectations last week. According to the Energy Information Administration, natural gas storage increased by 73 billion cubic feet, matching forecasts. Supplies rose by 90 billion cubic feet in the same week last year, while the five-year average change is an increase of 75 billion cubic feet.


Total U.S. natural gas storage stood at 3.334 trillion cubic feet, 15.8% higher than during the same week a year earlier and 4.1% above the five-year average for this time of year. Last spring, supplies were 55% below the five-year average, indicating producers have made up for all of last winter's unusually strong demand.

<http://www.investing.com/news/commodities-news/natural-gas-futures---weekly-outlook:-september-21---25-362481>  
(Investing.com) 9/20/15

### US Natural Gas Rig Count Rises despite Falling Natural Gas Prices

On September 18, Baker Hughes released its natural gas rig count report. It reported that the natural gas rig count rose by two to 198 for the week ending September 18, 2015. In contrast, the active natural gas rig count fell by six to 196 for the week ending September 11, 2015. The US active natural gas rig count rose for the third time in the last ten weeks.



Market Realist  <http://marketrealist.com/2015/09/natural-gas-prices-fall-fourth-day-due-mild-weather/>  
By Gordon Kristopher (Market Realist) 9/21/15

## Truck-builder Picks Luxfer Cylinders for its CNG System for its Vehicles



Riverside, Calif.-based McNeilus Truck & Manufacturing, a leading U.S. manufacturer of concrete mixer and refuse truck bodies, said it will exclusively use Luxfer carbon composite cylinders for its new Tailgate compressed natural gas (CNG) system for refuse trucks. Available in 60-, 75-, 90- and 105-DGE (diesel gallon equivalent) capacities, the NGEN Tailgate system uses an exclusive, streamlined design with 50 percent fewer fitting connections and 25 percent fewer plumbing components.

Two to four Luxfer cylinders are placed at the rear-end of the truck instead of on top, which reduces the overall height of the vehicle, eliminates the risk of tree branch or bridge impact to the system and offsets the weight of the front axle. A pressure-relief device system spans the full length of the cylinders and provides continuous heat protection.

“The tailgate system offers another lightweight option for refuse vehicles looking to utilize CNG for reducing fuel costs,” said Grant Wildgrube, senior project engineer at McNeilus. “It offers weight savings from the cylinders, and is easier to use and access.”

<http://www.truckingnews.com/equipment/truck-builder-picks-luxfer-cylinders-for-its-cng-system-for-its-vehicles/>

(Trucking News Online) 9/17/15

## Partners Work on State-Funded Project for Cleaner Natural Gas Engines

Thanks, in part, to a \$749,868 grant from the California Energy Commission (CEC), Enerpulse Technologies has partnered with Power Solutions International (PSI) to further reduce emissions from natural-gas-powered engines.

Enerpulse says the CEC grant is helping the company develop its C2 ignition system. According to the CEC, "ignition characteristics of natural gas fuel represent challenges to engine manufacturers working to satisfy tighter emission standards, achieve lower fuel consumption and higher engine performance." The CEC's stated goal is to "advance the functionality of natural gas ignition under high boost pressure and heavy [exhaust gas recirculation (EGR)] conditions to facilitate the development of engines with lower nitrogen oxides (NOx) and greenhouse gas (GHG) emissions."

Enerpulse says C2 will build upon the company's patented plasma-assisted combustion technology, which is currently found in its commercially available Pulstar spark plugs. The company will integrate proprietary electronic controls, creating a system that increases the size and duration of the plasma field during ignition and combustion. Enerpulse claims this strategy will enable reliable ignition timing and more efficient combustion of natural gas fuels, particularly under high boost and heavy EGR conditions.

Enerpulse is partnering with PSI to deliver a commercially viable natural-gas-fueled product that meets the CEC's stated objectives. Enerpulse's C2 ignition system will be incorporated into PSI's turbocharged 8.8-liter CNG engine, which is currently under development. In addition to turbocharging, PSI's new engine will employ cooled EGR to reduce emissions and improve fuel consumption. Enerpulse says introducing substantial amounts of cooled EGR presents significant challenges to conventional ignition systems in natural-gas-fueled engines, which will be addressed by C2.

[http://www.ngtnews.com/e107\\_plugins/content/content.php?content.11127#.VgF54pf6WT8](http://www.ngtnews.com/e107_plugins/content/content.php?content.11127#.VgF54pf6WT8)

(NGT News) 9/18/15

## Quantum to Showcase Its New High Capacity Q-Cab160/180 CNG Fuel Modules at the 2015 NGV Conference & Expo

Quantum Fuel Systems Technologies Worldwide, Inc. (NASDAQ:QTWW), a global leader in natural gas storage systems, integration and vehicle system technologies, today announced their exhibit at the 2015 North American Natural Gas Vehicle Conference & Expo (NGV) in Denver, Colorado from September 15<sup>th</sup> to 17<sup>th</sup>, 2015. Quantum will be showcasing its new high capacity Q-Cab<sup>160/180</sup> Back-of-Cab CNG Systems and also featuring its Q-Cab<sup>123</sup> alongside the Q-Rail<sup>46</sup> CNG Fuel Systems, located in the main hall at Booth No. C20. The new high capacity systems integrate Quantum's recently developed 30-inch diameter storage tanks.

Quantum's leading-edge engineering design delivers the highest capacity, lightest weight per DGE back of cab CNG fuel modules in the industry. Quantum's 180 DGE configuration represents the highest storage capacity for a back-of-cab system currently available in the industry.

<http://globenewswire.com/news-release/2015/09/14/768026/10149150/en/Quantum-to-Showcase-Its-New-High-Capacity-Q-Cab160-180-CNG-Fuel-Modules-at-the-2015-NGV-Conference-Expo.html>

(Globe Newswire) 9/14/15

## Ford's growing CNG, propane capable lineup



Fostering use of natural gas fuels is also good news for manufacturers like Ford Motor Co., which recently announced that its 2016 F-150 light-duty pickup model with a five-liter V8 engine will be offered with a gaseous-fuel prep option, making it capable of running on compressed natural gas or propane. With the addition of the F-150, Ford will offer eight vehicle groups with the capability to run on CNG or propane, which are:

- 2016 F-150;
- F-250 and F-350 Super Duty pickup;
- F-450 and F-550 Super Duty chassis cab;
- F-650 and F-750 chassis cab;
- F-53 and F-59 stripped chassis;
- Transit Connect van and wagon;
- Transit van, wagon, cutaway and chassis cab; and
- E-Series cutaway and stripped chassis.

Ford estimates as much as 70% of its vehicles purchased with CNG/propane packages are upfit before customers take delivery and another 20% are upfit within a year of purchase. Six Ford Qualified Vehicle Modifiers convert CNG/propane-prepped engines to run on natural gas or propane at 36 locations across the United States.

One of those companies, Westport Innovations also recently announced it will offer dedicated, liquid propane systems for 2016 Ford F-150 trucks. The new liquid propane system will be offered in addition to Westport's compressed natural gas package for the 2016 Ford F-150. Both alternative fuel system options, part of the Westport WiNG Power System, are expected to be certified to EPA and CARB standards.

<http://www.fleetequipmentmag.com/fords-cng-propane-trucks/>

By Seth Skydel (Fleet Equipment) 9/15/15

### **TDIndustries switches to CNG due costs and environment**

The program will use CNG-powered vehicles to perform daily Mechanical/Electrical/Plumbing (MEP) service operations. The construction company currently has an operating fleet of almost 400 vans. TD hopes that by switching to CNG they will emit fewer greenhouse gases, and have lower refuelling and maintenance costs.

“Natural gas is an abundant resource in Texas that will help drive our state’s future. We need to lead by example, as we get more involved with construction and providing service for CNG fueling stations and other energy related projects,” said Jason Cinek, Senior Vice President at TDIndustries.

This pilot program will guide TDs in determining the feasibility of natural gas vehicles, the availability of CNG fueling stations and how a fleet powered by natural gas can meet their operational needs, according to TD.

<http://www.petroplaza.com/news/industry/MiZlbiYxOTA2NyYmMSYzMCYx>

(Petro Plaza) 9/17/15

### **Clean Energy Fuels Corp (NASDAQ:CLNE) recently declared plans of constructing compressed natural gas (CNG) stations**

Clean Energy Fuels Corp (NASDAQ:CLNE) recently declared plans of constructing compressed natural gas (CNG) stations for providing fuel to transit vehicles in Arlington County, VA; Nassau Inter-County Express in Long Island, NY; and North Kansas City School District, which is likely to soon develop into the largest school district in the U.S.

<http://insidetrade.co/clean-energy-fuels-corp-nasdaqclne-recently-declared-plans-of-constructing-compressed-natural-gas-cng-stations/>

By Jason Sherring

(Inside Trade)

9/14/15

## LNG export facilities move forward in down market



### *Dominion Resources*

*The Cove Point LNG Import Terminal in Lusby, Md. is one of several facilities seeking to now export natural gas from U.S. shale plays. Dominion Resources is developing the 5.25 million tonnes per annum project on the Chesapeake Bay and expects it to be in service in 2017.*

Later this year, the first facility in the lower 48 states that is designed to export liquefied natural gas should begin shipments from the U.S. Gulf Coast. It's preparing to do so in a buyer's market, where oil and natural gas prices have stayed stubbornly low. Globally, one of the biggest gas consumers, China, is also seeing slower growth than had been predicted.

Prolific production from shale plays across the United States, including the Marcellus Shale, have producers looking overseas to sell natural gas to deal with the domestic supply glut of natural gas. Meanwhile, other countries, like Australia, also want to export their own gas supplies.

The first mover, Houston-based Cheniere Energy, plans to begin shipping LNG from Louisiana. The facility, Sabine Pass, ultimately will be able to ship about 4.5 million tonnes per annum. Global consultancy Wood Mackenzie noted that, despite the outlook for LNG demand on a worldwide scale looking "increasingly subdued," the number of projects lined up for a final investment decision in 2015 and 2016 has not faltered.

In a report released earlier this month, the firm said that if there are no postponements, "The market could see an additional 100 million tonnes per annum of LNG sanctioned in the next six to 18 months, extending the likelihood of an oversupply of LNG to Asia in 2025."

While one company, BG Group, postponed its proposed LNG export project at Lake Charles on the Gulf Coast, "BG's postponement has been an exception," according to Noel Tomnay, vice president, global gas & LNG research for Wood Mackenzie. Global liquefied natural gas supply is around 250 million tonnes per annum, and there is another 140 million tonnes per annum under construction, according to Mr. Tomnay.

Rafael McDonald, director of global gas and liquefied natural gas for IHS Energy, notes the LNG sector is prone to cycles. "These cycles have a tendency to be out of sync with each other, entering a period of large supply growth and not seeing demand grow as quickly," he said.

<http://powersource.post-gazette.com/powersource/companies/2015/09/22/LNG-export-facilities-move-forward-in-down-market-natural-gas-marcellus-shale/stories/201509220012>

By Stephanie Ritenbaugh      sritenbaugh@post-gazette.com      (Pittsburgh Post-Gazette)      9/22/15

## Truckers Slowly Warm To Cold Liquefied Natural Gas

Even though natural gas is often cheaper than diesel, operators still may not be able to amortize the higher purchase price over the operating life of a truck. However, policy changes surrounding liquefied natural gas (LNG) could boost the appeal of natural gas with truckers, according to Navigant Research.

Unlike compressed natural gas (CNG), LNG is cooled until it transitions from a gaseous to a liquid form.



2014 Peterbilt 579

LNG is denser than CNG, and hence easier to transport by road in specially-equipped tankers. Gaseous CNG is generally transported via pipeline. Earlier this year, President Barack Obama signed a bill that changed the tax code to give LNG fuel (along with propane), a more equal basis for taxation compared to diesel. Previously, LNG was taxed by volume instead of energy content.

[http://www.greencarreports.com/news/1100128\\_truckers-slowly-warm-to-cold-liquefied-natural-gas](http://www.greencarreports.com/news/1100128_truckers-slowly-warm-to-cold-liquefied-natural-gas)

By Stephen Edelstein      (Green Car Reports)      9/21/15







### Partners submit application for 3-state natural gas pipeline

CHARLESTON, W.Va. (AP) — Four energy partners formally asked the federal government on Friday for permission to build a 564-mile natural gas pipeline in West Virginia, Virginia and North Carolina.

The \$5 billion Atlantic Coast Pipeline is intended to deliver cleaner burning natural gas to the Southeast as utilities move away from coal-burning power plants amid tighter federal rules on pollution that contributes to climate change.

Richmond, Virginia-based Dominion Resources Inc. and Charlotte, North Carolina-based Duke Energy would have 45 percent and 40 percent ownership stakes in the pipeline, respectively. Charlotte-based Piedmont Natural Gas would have a 10 percent ownership and Atlanta-based AGL Resources, 5 percent.

The pipeline would carry natural gas from Marcellus shale drilling in Pennsylvania, Ohio and West Virginia to the Southeast. It would run from Harrison County, West Virginia, southeast to Greensville County, Virginia, and into North Carolina.

<http://www.blueridgenow.com/article/20150920/news/150919808>

JOHN RABY (Associated Press) (Blueridgenow.com) 9/20/15

### Dominion Cove Point files status update

Dominion Cove Point LNG has filed its monthly status and update report to the US Federal Energy Regulatory Commission (FERC) regarding its Cove Point Liquefaction Project.

According to the August 2015 report, engineering on the LNG project is 94% complete, while procurement and construction stood at 78% and 10% complete, respectively. The Dominion Cove Point LNG terminal is located on Chesapeake Bay in Lusby, Maryland, US.

<http://www.lngindustry.com/liquefaction/18092015/Dominion-Cove-Point-files-status-update-1320/>

Edited from press release by Callum O'Reilly (LNG Industry) 9/18/15

### Gas producers partner with utilities to extend public water lines

Seven years ago, officials at Pennsylvania American Water debated whether the company should provide water to the new shale gas industry taking hold in the state. "In the early days, there were a lot of issues around water quality and water quantity," Senior Vice President Kathy Pape said last week during a gas industry conference in Philadelphia. "There were concerns that the bad reputations of shale gas drillers would rub off on us. We're very protective of our reputation."

Not only did the company start serving the industry, it's among several water utilities that have partnered with gas drillers and producers on multimillion-dollar projects. Some gas companies working in the Marcellus and Utica shales are paying to extend public water lines into rural areas to provide the millions of gallons needed for hydraulic fracturing, or fracking, of their wells, and in some cases building treatment plants as well. Homes and businesses along the new water line routes can tap into public service, which will remain long after the drillers leave, and will host fewer water trucks on their roads.

"It's a win-win-win," said Jack Golding, manager of the Southwestern Pennsylvania Water Authority in Greene County, which teamed this summer with Colorado-based Vantage Energy on a \$30 million project to build water mains and expand the facility that treats river water for use. "For us, this is a good deal. We get lines extended that would probably never get extended, and it gives us the ability to keep residential rates low," he told the Tribune-Review.

<http://marcellus.com/news/id/129141/gas-producers-partner-with-utilities-to-extend-public-water-lines/>

DAVID CONTI (The Pittsburgh Tribune-Review) (Marcellus.com) 9/21/15

### BW Pavilion LNG attains funds for new LNG tankers

Recently, BW Pavilion LNG – a joint venture between BW Group and Pavilion Energy – announced that it has secured a loan of US\$360 million, which it will use to fund to its two new LNG vessels: *BW Pavilion Vanda* and *BW Pavilion Leeara*. The vessels will be built at Hyundai Heavy Industries.

<http://www.lngindustry.com/lng-shipping/21092015/BW-Pavilion-LNG-attains-funds-for-new-LNG-tankers-1326/>

(LNG Industry) 9/21/15



### **Progress on cutting fossil fuel subsidies “alarmingly slow” – OECD**

Major nations are “alarmingly slow” in keeping pledges to cut fossil fuel subsidies despite signs of a decline in support worth up to \$200 billion a year, the Organisation for Economic Cooperation and Development (OECD) said on Monday.

Reductions in damaging subsidies for oil, coal and natural gas would reduce air pollution, save cash and help a shift to greener energies before a Nov. 30-Dec. 11 U.N. summit in Paris on limiting climate change, it said.

“We are totally schizophrenic,” OECD Secretary-General Angel Gurría told an online news conference. “We are trying to reduce emissions and we subsidize the consumption of fossil fuels” blamed for stoking global warming.

“Support for fossil fuels seems to have peaked, but global progress remains alarmingly slow,” he said of an updated inventory of subsidies.

The OECD estimated the annual value of subsidies for 2010-14 at between \$160 billion and \$200 billion, mostly for petroleum products, in the 34 OECD nations and China, India, Brazil, Russia, Indonesia and South Africa.

The Group of 20 leading economies agreed as long ago as 2009 to phase out inefficient subsidies for fossil fuels.

<http://marcellus.com/news/id/129185/progress-on-cutting-fossil-fuel-subsidies-alarmingly-slow-oecd/>

(Additional reporting by Barbara Lewis in Brussels; Editing by Dale Hudson)

(Marcellus.com)

(Reuters)

9/21/15

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**The Ben Franklin Shale Gas Innovation and Commercialization Center ([www.sgicc.org](http://www.sgicc.org)) is designed to harness innovation and new technologies to maximize the economic return to Pennsylvania’s citizens from the Marcellus and Utica shale formations. The Center’s goal is to increase sustainable employment and wealth creation in Pennsylvania that has the potential to outlast the initial exploration, production and transportation of natural gas from the formations. The Center will also identify, support and commercialize technologies and early-stage businesses that enhance responsible stewardship of the environment while properly utilizing this transformative energy asset.**

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