

Natural gas futures weekly recap, June 16 – June 20

Natural gas fell for a third straight day on Friday and settled the week over 4% lower after the Energy Information Administration reported a larger-than-expected gain in US natural gas inventories, while weather forecasts showed cooling conditions across some parts of the country.

On the New York Mercantile Exchange, natural gas futures for settlement in July fell by 1.16% on Friday to close the session at \$4.531 per million British thermal units. Prices shifted between a one-week low of \$4.516 and \$4.614 per mBtu. The energy source slid in four out of five days this week, closing the five-day period 4.5% lower.

Natural gas extended its weekly decline on Thursday after the Energy Information Administration reported a larger-than-projected build in US natural gas inventories during the week ended June 13th. The log revealed a gain of 113 billion cubic feet, while analysts at NatGasWeather.com had suggested a 105-110 Bcf injection. The 5-year average gain for the week is 85 Bcf. Inventory levels remain 29.1% below last year's readings for the same week.

However, movement to the downside is expected to be limited as the US enters the summer season when high temperatures spur electricity demand to power air conditioning, with power stations accounting for 30% of US natural gas consumption.

<http://www.binarytribune.com/2014/06/22/natural-gas-futures-weekly-recap-june-16-june-20/>

Author: Teodor Dimov (Binary Tribune) 6/22/14

Utility Fleet Rolls Out 24 Honda Civic Natural Gas Vehicles



Photo courtesy of PGW

Municipal utility Philadelphia Gas Works (PGW) has debuted its new fleet of two dozen Honda Civic Natural Gas sedans, marking the kickoff of the company's natural gas vehicle initiative.

PGW acquired the Civics - 18 model-year 2014 NGVs and six model-year 2012 - from Pittsburgh-based Dean Honda. The company tells *NGT News* that they will all be used by PGW's sales team and as a part of its fleet pool. The Civics will be stored and maintained at PGW headquarters.

For now, the company will acquire fuel at public-access CNG stations in the area - mainly Clean Energy Fuels Corp. locations. More public stations are set to open locally this summer, and PGW itself will be installing a fueling station at its headquarters. That project is anticipated to be completed in September.

The 24 Civics - which were deployed with the assistance of funds from the state's Alternative Fuels Incentive Grant program - are the first NGVs that PGW has owned in recent history, and are its first Hondas.

http://www.ngtnews.com/e107_plugins/content/content.php?content.9846#.U6g5pbGwU20

(NGT News) 6/20/14

Waste Management goes ‘greener’ with CNG fleet

FAIRBORN — Waste Management is working to create a greener and cleaner community with the environmental benefits of compressed natural gas (CNG).

The local waste disposal, collection and removal conglomerate, located at 1700 North Broad St., dedicated its new compressed natural gas (CNG) fleet and fueling facility on Thursday, June 19 in Fairborn. The 33 new CNG trucks service the Dayton area and make up Waste Management’s second fleet of CNG trucks in Ohio, the first being in Columbus.

“We’re very excited about our new CNG fleet and the fueling station,” said Waste Management Area VP Denise Gretz. “The first 33 CNG trucks hit the Dayton area streets a few months ago proudly serving our customers. Another 25 CNG trucks will be in action by this fall.”

As of Thursday, Waste Management has over 3,000 trucks running on CNG company-wide, and every year their “green” fleet will grow with their ultimate goal being to move towards a true zero emissions vehicle.

http://xeniagazette.com/news/home_top-news/5054544/Waste-Management-goes-greener-with-CNG-fleet

By Amanda Crowe acrowe@civitasmedia.com (xeniagazette.com) 6/20/14

New Models Selling Well, Natural Gas ‘Happening,’ KW Reps Say



Roomy, comfortable T680 is a sales “home run” for Kenworth as it’s quickly edging out the older T660. *Photo: Tom Berg*

Revival in construction activity is driving healthy sales of vocational trucks, a recently launched highway tractor has become a “home run,” and interest in natural gas power should cause that segment to grow to 15-20% of heavy truck sales by 2020, Kenworth Truck representatives said at a briefing for reporters Friday morning.

Like the T880, the T680 uses a cab that’s longer, wider and quieter than the cab on older models. It’s 2.1 meters (82.7 inches) wide, about 8 inches more than the narrow cab on the T660 and other older Kenworths.

Aside from extra interior room, the wider cab covers the entire front of a cabinet that houses tanks for compressed natural gas, said Andy Douglas, national sales manager for specialty vehicles. Behind a narrower cab, a CNG cabinet sticks out to where he and others call it a “flying mattress.” Now the aerodynamics of the T680’s nose and cab are extended past the CNG cabinet, adding a bit of fuel economy.

Early adopters of gas were operators of transit buses, then refuse trucks, which stay close to fueling points, he said. Also, “they had an engine, the 9-liter” ISL G from Cummins Westport. Now operators of concrete mixer trucks are beginning to buy, and on-road operators are being pushed into gas by shippers who want sustainability and a “green” image. Cummins Westport’s ISX12 G is the enabling engine for viable operation of 80,000-pound tractor-trailers

<http://www.truckinginfo.com/channel/fuel-smarts/news/story/2014/06/new-models-selling-well-natural-gas-happening-kw-reps-say.aspx>

By Tom Berg (Truckinginfo) 6/20/14

Clyde Launches Medium-Duty CNG Truck Line



Photo: Clyde Truck

New York-based Clyde Trucks is now offering a line of Class 4 and 5 compressed-natural-gas (CNG)-powered, cab forward, medium-duty trucks. Manufactured in the United States, these trucks are well suited for commercial deliveries of produce, meat, seafood, newspapers, and municipalities, including highway departments and parks departments, according to the company.

The line includes a 14,500 GVWR, a 17,950 GVWR, and a 19,500 GVWR models, fitted with tanks that will give each truck a range of over 400 miles. The trucks are equipped with a 6.0L V-8 LC8 gaseous ready engine, which produces 323 hp and 373 lb.-ft. of torque. The CNG tank has a capacity of 25 GGE.

<http://www.automotive-fleet.com/channel/green-fleet/news/story/2014/06/clyde-launches-class-4-and-5-medium-duty-cng-truck-line.aspx>

(Automotive Fleet) 6/19/14

Natural gas power plant planned in Salem Twp.



Virginia-based Moxie Energy wants to build a natural gas power plant along Route 11 in Salem Township, a few miles away from the PPL nuclear power plant, according to the state Department of Environmental Protection. DEP spokeswoman Colleen Connolly said the company is in the early stages of planning the 900-megawatt power plant which is being called the “Moxie Freedom Project.”

The project is designed to use locally-produced natural gas from Marcellus Shale to produce electricity to sell back to the grid. The plant would connect to the existing Transco pipeline, she said.

<http://citizensvoice.com/news/natural-gas-power-plant-planned-in-salem-twp-1.1706620>

By Denise Allabaugh dallabaugh@citizensvoice.com, 570-821-2115 (Citizensvoice.com)

6/21/14

Natural gas export project OK'd by DOE

In the midst of a worldwide shortage of natural gas, liquefied natural gas exports from the Port of Brownsville may be closer to reality, thanks to a decision this month by the U.S. Department of Energy.

The DOE gave permission to Houston-based Texas LNG to export domestic natural gas from Brownsville to foreign countries that have Free Trade Agreements with the United States.

The company also entered into an agreement with Samsung Engineering Co. Ltd. to provide upfront engineering on the project, which calls for a liquefaction facility to be constructed on a barge, floated across the ocean to the Brownsville Ship Channel, then transferred to the shore. Gas must be liquefied before it can be transported overseas. Samsung will also become a minority equity interest owner in the project.

Vivek Chandra, the Texas LNG's CEO, said the DOE authorization and Samsung's involvement indicate significant progress on the regulatory front as well as the project's capacity for attracting "blue chip players."

Samsung has already started preliminary engineering design work and said the conceptual study for the project is complete. Texas LNG is on track to begin the pre-filing process for Federal Energy Regulatory Commission approval later this year.

The port is popular with more than one LNG export company because of its proximity to the Eagle Ford Shale, which is producing unprecedented amounts of natural gas through "fracking," transforming the nation from a net importer to a net exporter of natural gas practically overnight.

http://www.valleymorningstar.com/news/local_news/article_a6dc1712-f9b5-11e3-88ce-001a4bcf6878.html

By STEVE CLARK Staff Writer sclark@brownsvileherald.com (Valley Morning Star) 6/21/14

Terntank orders two more LNG fueled tankers



Skagen, Denmark, headquartered Terntank Rederi A/S has exercised its options to add two new LNG-fueled 15,000 dwt tankers to the two it ordered at China's AVIC Dingheng Shipbuilding Co., Ltd. in autumn last year.

The four ships will be delivered from the shipyard at three-month intervals, with the first set for delivery in the spring of 2016 and the fourth in the beginning of 2017. Two of the new ships will be long-term chartered by NEOT, North European Oil Trade Oy, of Finland.

Terntank says it elected to declare its two options because there is considered to be a demand for energy efficient and environmentally adapted tanker tonnage.

http://www.marinelog.com/index.php?option=com_k2&view=item&id=6881:terntank-orders-two-more-lng-fueled-tankers&Itemid=231

(Marine Log) 6/20/14

World First: Inland Vessel Retrofitted for LNG



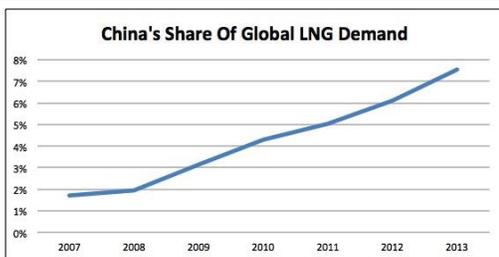
The Innovation and Networks Executive Agency (INEA) has inaugurated the *Eiger-Nordwand*, the first inland waterway vessel to be retrofitted with pollution-reducing LNG engines. This pilot vessel represents one of the milestones of the EU-supported “LNG Masterplan Rhine-Main-Danube” project, which is a series of studies and trials to assess the use of LNG as a shipping fuel in the European inland waterway sector.

<http://www.maritime-executive.com/article/World-First-Inland-Vessel-Retrofitted-for-LNG-2014-06-20>

By MarEx (The Maritime Executive) 6/20/14

BP Looks To Tap China's Growing Natural Gas Demand With A \$20 Billion LNG Deal

BP Plc. is set to sign a \$20 billion liquefied natural gas deal with China National Offshore Oil Corporation. Through this 20-year LNG supply contract, the London-based energy giant plans to tap into the fast-growing demand for natural gas in China. The company is expected to source LNG from the Freeport LNG project in the U.S. In February last year, BP entered into a 20-year natural gas liquefaction tolling contract for 4.4 million tons per annum capacity at the upcoming LNG plant on Quintana Island, Texas.



Data Source: *BP Statistical Review of World Energy 2014*

<http://www.forbes.com/sites/greatspeculations/2014/06/20/bp-looks-to-tap-chinas-growing-natural-gas-demand-with-a-20-billion-lng-deal/>

Trefis Team , Contributor (Forbes) 6/20/14

How innovation in oil and gas production is giving the U.S. a competitive edge

Innovations in the oil and gas industry are making production faster and cheaper and resources more plentiful.

What happened? The oil and gas industry innovated. Over the past century, oil and gas drilling has gone from a business dominated by wildcatters armed with a hunch and a prayer to one that is more akin to the precision manufacturing that dominates aerospace and automobiles. Today, drilling rigs are so good that they can punch holes in the earth that are two miles deep, turn the drill bit 90 degrees, drill another two miles horizontally, and arrive within a few inches of the target.

The ongoing innovation in the oil and gas sector is happening because the U.S. has more companies working to find and deliver oil and gas than any other country in the world. More than 6,000 independent oil and gas companies are now operating in the U.S. In addition, there's a similar number of companies providing services to those independent producers, supplying them with everything from drill bits to diesel fuel. In all, there are roughly 12,000 different companies in the oil and gas sector whose very existence depends on finding better ways to do things. To be more specific, they are trying to make their products and processes smaller, faster, lighter, denser and cheaper.



How innovation in oil and gas production is giving the U.S. a competitive edge

(Continued)

Among the most innovative is Tulsa-based Helmerich & Payne, which has been a leader in the development and deployment of the AC top-drive drill rig. First used in offshore drilling operations, Helmerich & Payne's leaders saw that the AC top-drive — which puts the rig's main drive mechanism onto the mast of the rig instead of on the rig's floor — could result in major efficiency improvements for companies drilling on land in shale and other formations.

The AC top-drive consolidates the rig's drive and hoist mechanism into one unit. That allows the automation of several mundane processes that used to require human intervention. Although many of the operations on the rig still must be handled by roughnecks, a bank of computers monitor key data points such as rotational speed on the bit and drilling and flow rates. The computers feed that data into an automated drilling-control system which keeps the optimum amount of weight on the drill bit and keeps it spinning at optimal speed. Add in the rig's ability to use longer sections of drill pipe and its modular design — which allows it to be transported more quickly than older rig designs — and it's easy to see how companies are able to drill more wells and do so faster and cheaper.

In addition to better drilling rigs, numerous other technologies, ranging from better drill bits and seismic techniques to more powerful pumps and nanotechnology, are allowing the oil and gas sector to accelerate the drilling process.

Faster drilling has allowed U.S. companies to produce oil and gas more cheaply. That can be seen by looking at Southwestern Energy, a Houston-based company that has pioneered the development of the Fayetteville Shale in Arkansas. Between 2007 and 2012, the company's per-well costs in the Fayetteville Shale have stayed fairly constant, at about \$3 million per well. But over that same time frame, Southwestern reduced the number of days needed to drill a well from 17 to just seven. Better yet, the initial production rate on the wells being drilled has more than tripled.

Thanks to companies like Helmerich & Payne, Southwestern, and many others, the U.S. now has a price advantage for natural gas that is second to no other country on the planet, with the possible exception of Qatar. Over the past two years or so, U.S. natural gas prices — measured at the Henry Hub in Louisiana — have averaged about \$4 per million BTU. In the European Union, that same 1 million BTUs of gas will cost two to three times as much. In Japan, it will cost three to four times as much. European steelmakers now pay about twice as much for electricity and four times as much for natural gas as steel producers operating in the U.S.

Cheaper energy is attracting tens of billions of dollars of foreign investment to the U.S. Last year, an Egyptian company, Orascom, began construction on a new \$1.8 billion fertilizer plant in Iowa. Last June, Vallourec, a French company, opened a new steel mill in Youngstown, Ohio, a Rust Belt town that has seen many of its industrial jobs evaporate over the past few decades. Vallourec's investment in the new steel mill: \$1.1 billion. Sasol, a South African company, is spending \$21 billion on a new gas-to-liquids facility in Lake Charles, Louisiana. The project is believed to be the single largest foreign investment in U.S. history.

Late last year, BASF, the giant German industrial company, estimated that it could save nearly \$700 million per year in energy costs if it were to relocate all its plants to the U.S. That clearly will not be happening, but it is indicative of the energy-cost advantage that the U.S. now enjoys. And that advantage is attracting more investment from BASF. The world's biggest chemical maker by sales, BASF doubled the amount of capital that it invests in the U.S. In 2010, the company was investing about \$500 million per year in the U.S. By 2013, that figure had jumped to \$1 billion per year, and BASF expects to continue its annual investments at that level through 2017.

Cheaper energy is not only attracting foreign investment dollars, it's also stimulating the economy. Last fall, Wallace Tyner, an energy economist at Purdue University, along with two of his Purdue colleagues, estimated that the shale revolution was adding some \$473 billion per year to the U.S. economy, or about 3 percent of GDP.

The history of the oil and gas sector is one of advancing knowledge and increasing resource availability. And those advances are giving the U.S. a significant economic advantage over the rest of the world that will endure for many years to come. <http://www.pbs.org/newshour/making-sense/how-innovation-in-oil-and-gas-production-is-giving-the-u-s-a-competitive-edge/>

BY Robert Bryce

(PBS) 6/19/14



Supporting innovation in the shale gas energy industry



How do you find emerging technological innovations across a large state like Pennsylvania? The Shale Gas Innovation and Commercialization Center created a contest.

“Clearly, we needed them to find us, so we invented the Shale Gas Innovation contest,” William Hall, the center’s executive director said in a statement. This year the contest has grown to \$100,000, with four \$25,000 prizes, 17 industrial sponsors, and Ben Franklin Technology Partners.”

The contest gives businesses the chance to win funding for their shale-oriented ideas but it is not the only thing Mr. Hall’s center does for the natural gas community. The center operates as a statewide resource for Ben Franklin Technology Partners and identifies, encourages and supports investments in the shale gas energy space.

“This year we received a grant from the Discovered and Developed in PA program administered by the state Department of Community and Economic Development. This allows us to provide grants to small companies with innovative technology solutions, helping them gain traction in the shale gas market,” Mr. Hall said. “It also allows us to fund white paper studies on critical topics.”

Before founding the center in March 2011, Mr. Hall worked with hydroelectrics in the Dominican Republic and served as chief operating officer of the environmental consulting firm, the Dunn Corp. He also started a pipeline services group for Severn Trent Services, a wastewater utility company, and spent 18 months as the president of Bioengineering Group, a small business in Massachusetts that worked in New Orleans doing flood control restoration post-Hurricane Katrina.

<http://powersource.post-gazette.com/powersource/companies-powersource/2014/06/17/Father-son-company-helping-to-clean-up-the-energy-industry/stories/201406170005>

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A demand for sand: Well operators using more and more to boost productivity

The volume of frack sand used at each well to prop open newly created fissures and allow gas to flow to the wellbore has been on the rise over the past year. “Most customers are pumping as much as they can,” said Iain McIntosh, vice president at Baker Hughes.

Baker Hughes has seen the use of sand, or proppant, double over the past eight to 10 months, McIntosh said at Hart Energy’s DUG East conference this month. Weatherford, another service firm operating in the area, has seen proppant volumes shoot up 50 percent in the first quarter of 2014, according to Robert Fulks, its director of strategic marketing for pressure pumping. “Some people refer to that as brute force,” Fulks said during the Hart event. “You’re seeing wells pumped now with seven, nine, 11 billion pounds of sand.”

In the meantime, demand for sand has put heavy burdens on railroads that transport the commodity from mines in the Midwest and on trucks that deliver it to well sites. The real conundrum is in the logistics. According to PacWest Consulting Partners, a Texas-based market intelligence firm, the Marcellus will require more than 13 billion pounds of frack sand this year, up from 9.6 billion pounds last year. In 2015, that’s expected to increase to nearly 15.8 billion pounds.

The rest stems from operators’ belief that the more sand you get into the cracks, the more gas will flow out of them.

Canonsburg, Pa.-based Rice Energy Inc. pumped 28 million pounds of sand into a Utica Shale well in Ohio last month, more than five times what companies were pumping a few years ago. The well debuted with an initial production of 41 million cubic feet per day, a record for the shale play.

“There’s just a general consensus there’s not enough trucks out there,” said Mike Fisher, who manages oil and gas trucking operations at Sewickley, Pa.-based trucking firm Modern Transportation. The shortage is nationwide, he said, but it’s more acute in areas with robust oil and gas drilling.

<http://www.gosanangelo.com/news/2014/jun/19/a-demand-for-sand-well-operators-using-more-and/>

By Anya Litvak Pittsburgh Post-Gazette (MCT) 6/19/14



Big oil and natural gas groups warn Pennsylvania against severance taxes

Pennsylvania's three biggest oil and gas associations, which represent multinational giants, are warning state lawmakers that raising taxes on the booming natural gas drilling industry could have economic repercussions.

The letter, obtained Friday by The Associated Press, was signed by the heads of the Associated Petroleum Industries of Pennsylvania, Marcellus Shale Coalition and Pennsylvania Independent Oil & Gas Association.

It was addressed to 11 top lawmakers in the Republican-controlled Legislature.

In it, the trio says the enactment of a severance tax, like other major gas-producing states impose, could make Pennsylvania less competitive and drive the companies to shift crews and rigs to other states.

Lawmakers are discussing a severance tax to ease a massive budget shortfall. Gov. Tom Corbett, an industry ally, says he dislikes the idea.

<http://www.poonorecord.com/apps/pbcs.dll/article?AID=/20140621/NEWS90/140629976/-1/NEWS>

(Associated Press)

(Pocono Record)

6/21/14

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About the SGICC

The Ben Franklin Shale Gas Innovation and Commercialization Center (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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