

## Natural gas prices reverse gains after U.S. storage data



Natural gas for delivery in April on the New York Mercantile Exchange shed 0.7 cents, or 0.37%, to trade at \$1.861 per million British thermal units by 14:32GMT, or 10:32AM ET. Prices were at around \$1.882 prior to the release of the supply data. The U.S. Energy Information Administration said in its weekly report that natural gas storage in the U.S. in the week ended March 11 declined by just 1 billion cubic feet, compared to expectations for a fall of 2 billion.

That compares with draws of 57 billion cubic feet in the prior week, 43 billion cubic feet in the same week last year and a five-year average of around 71 billion. Total U.S. natural gas storage stood at 2.478 trillion cubic feet, 40.2% higher than levels at this time a year ago and 32.5% above the five-year average for this time of year.

Some market experts worry there may be too much gas left in storage at the end of March when utilities traditionally start injecting the fuel back into storage for the next winter.

Natural gas prices have been on a downward trend since early 2014, as natural gas producers, especially shale drillers, pulled near record amounts of the fuel out of the ground.

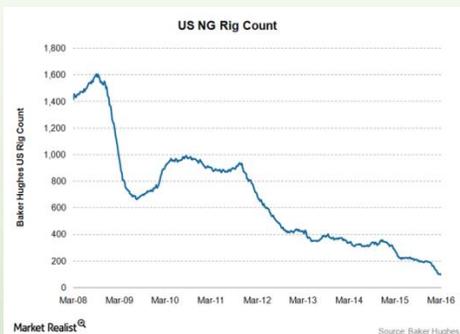
<http://www.investing.com/news/commodities-news/natural-gas-prices-reverse-gains-after-u.s.-storage-data-390547>

(Investing.com)

3/17/16

## US Natural Gas Rig Count Tests a 29-Year Low

Baker Hughes (BHI) will release its weekly natural gas rig count report on March 18, 2016. The weekly US natural gas rig count fell by three rigs to 94 rigs for the week ended March 11, 2016, compared with the previous week. Prior to that, in 2016, the US natural gas rig count had already fallen by 68 rigs due to lower natural gas prices.



### *US natural gas peak and lows*

The US natural gas rig count peaked at 1,606 rigs on September 12, 2008. By contrast, the count tested a 29-year low of 94 rigs on March 11, 2016, due to the multi-year low in natural gas prices. (You can read more about natural gas prices in Part 1 of this series.) Low natural gas prices also led to a big decline in natural gas drilling activity. The US natural gas drilling activity fell by 63% from 2015 levels. Remember, this fall in drilling activity affects oil and gas drillers like Pacific Drilling (PACD), Atwood Oceanics (ATW), Schlumberger (SLB), Superior Energy Services (SPN), and Halliburton (HAL).

### *The EIA's latest report*

The EIA's (US Energy Information Administration) monthly drilling report suggests that US natural gas drilling activity will decline by 450 MMcf per day (million cubic feet per day) to 46, 308 MMcf per day in April 2016, compared with March 2016, in the major shale regions. The fall in drilling activity suggests the natural gas rig count could fall even further.

<https://marketrealist.com/2016/03/us-natural-gas-consumption-forecasts-2016-2017/>

By Gordon Kristopher

(Market Realist)

3/18/16

### US natural gas consumption in 2016 and 2017

The EIA (US Energy Information Administration) in its March month STEO (Short-Term Energy Outlook) report stated that US natural gas consumption could average 76.7 Bcf per day in 2016 and rise to 77.31 Bcf per day in 2017. US natural gas consumption would be driven by a rise in demand from the industrial sector, whose natural gas consumption is estimated to rise by 2.9% in 2016 and by 2.2% in 2017.

Meanwhile, new projects in the fertilizer and chemicals sectors will come online in 2016 and 2017, which would also drive the demand. The steady demand from residential and commercial segments will also likely support natural gas consumption in 2017.  
<https://marketrealist.com/2016/03/us-natural-gas-consumption-forecasts-2016-2017/>

By Gordon Kristopher (Market Realist) 3/18/16

### TruStar Energy Tapped for 12 New CNG Stations

TruStar Energy says it has been tapped to build and maintain 12 new compressed natural gas (CNG) fueling stations for UPS. According to the energy provider, it will service the stations under a long-term maintenance agreement. In 2015, TruStar Energy built 15 CNG fueling stations for UPS.

UPS announced plans to add 380 new CNG tractors to its growing alternative fuel and advanced technology fleet. The CNG fueling stations, vehicle purchases and CNG infrastructure totaling \$100 million are part of the company's ongoing commitment to diversify its fuel sources and reduce its environmental impact.

The 12 new CNG stations will be built by TruStar Energy in Amarillo, Texas; Chattanooga, Tenn.; Columbia, S.C.; El Paso, Texas; Fort Worth, Texas; Kansas City, Kan.; Phoenix; Reno, Nev.; San Antonio; Tifton, Ga.; Trinidad, Colo.; and Willow Grove, Pa. The new CNG tractors to be deployed in these cities will be manufactured by Kenworth, and the CNG storage systems will be provided by Agility and Quantum Fuel Systems. This investment builds on the 18 existing UPS CNG fueling stations in Alabama, California, Colorado, Georgia, Kansas, Kentucky, Louisiana, Oklahoma, Pennsylvania, Texas, Virginia and West Virginia.

<http://ngtnews.com/trustar-energy-tapped-for-12-new-cng-stations/>

by NGT Staff (NGT News) 3/18/16

### Lower Costs and Emissions Continue to Drive Conversion to CNG



photo courtesy of Waste Pro

Despite lower diesel prices remaining steady and with the added caveat of a tax credit extension for alternative fuels, waste haulers remain committed to converting their fleets to compressed natural gas (CNG).

Marty Tufte, corporate fleet director for Waste Management, says the Houston-based company continues to add CNG trucks to its fleet, while also focusing on the needed infrastructure to fuel them.

At the end of the four quarter, Waste Management's fleet included 5,021 natural gas trucks. It also operated 84 fueling stations in North America, of which 25 are also open to the public, with three additional stations open to contracted third-party fleets.

“Our North American fleet includes 32,174 collection and support vehicles, and 18,949 of these are dedicated to collection. We are committed to reducing the environmental impacts of these vehicles and reducing our emissions and improving our fuel efficiency,” says Tufte. “We strive to purchase nearly 90 percent of our new trucks with CNG.”

<http://waste360.com/fuel/lower-costs-and-emissions-continue-drive-conversion-cng>

Megan Greenwalt (Waste 360) 3/16/16



### **Matheson Trucking Adds 37 New CNG and LNG Tractors**

Matheson Trucking Inc. has added 25 new compressed natural gas (CNG) and 12 liquefied natural gas (LNG) tractors to its postal services division fleet as part of a company-wide clean energy expansion program.



“With annual fleet distances driven totaling nearly 36 million miles, combining peak and non-peak times, we continue to search for ways to reduce our carbon footprint and greenhouse-gas emissions to enhance the environment,” says Debra White, vice president of information technology and fleet maintenance. “We’re not doing this just to meet EPA clean air and state emissions standards – it’s the right thing to do.”

The company introduced 12 LNG Kenworth T880 day cabs in Oakland, Calif., in January and has completed the deployment of 17 CNG Kenworth T680’s in Boise, Idaho. Matheson is in the process of taking delivery of eight additional CNG T680 sleeper cabs for its Los Angeles-to-Seattle runs.

The CNG tractors destined for Boise include five three-axle sleepers, 10 three-axle day cabs and two single-axle day cabs. These tractors pull a mix of trailers in Boise, with most in the 53-foot-long category used to transport U.S. Postal Service mail along designated routes.

“We plan to increase our inventory of green CNG tractors in the fleet wherever it is practical and cost-effective to do so, and while diesel may still have an edge on long-haul routes, Matheson wants to move in a positive, responsible direction by becoming less dependent on fossil fuel,” says Joshua Matheson, vice president of operations

<http://ngtnews.com/matheson-trucking-adds-37-new-cng-and-lng-tractors/>

by NGT Staff (NGT News) 3/15/16

### **TransCanada Gains Critical Foothold in Marcellus Region with Columbia Pipeline Deal**

The company owns approximately 15,000 miles of interstate pipelines extending from NY to the Gulf of Mexico and underground natural gas storage systems, as well as related gathering and processing assets. "We believe that will lead to additional material growth opportunities not only through the end of the decade but for very many more years to come". The transaction is subject to CPG shareholder approval and regulatory approvals. Huge supplies of cheap gas from the Utica and Marcellus shale plays have pushed volumes in western Canada out of their markets, as producers in the US seek buyers who are new for their fuel in Canada. The energy company will pay \$25.50 to each shareholders of Columbia Pipeline and would also assume liabilities of \$2.8 billion.

Columbia Pipeline owns more than 24,000 kilometres of gas pipelines in the U.S. It underlines the dramatic shift that has upended North American natural gas markets and decimated TransCanada's traditional long-haul gas shipments, once a pillar of its sprawling transport franchise.

Pipeline company TransCanada said the \$10.2 billion acquisition of a regional rival could make it the largest natural gas transmitter in North America. The acquisition will improve TransCanada's access to the US Northeast, Midwest, Mid-Atlantic, and Gulf Coast markets. <http://stateofthestateks.com/2016/03/21/transcanada-gains-critical-foothold-in-marcellus-region/>

<http://stateofthestateks.com/2016/03/21/transcanada-gains-critical-foothold-in-marcellus-region/>

(State of the State KS) 3/21/16

### Virginia lawmakers back natural gas pipeline

NORFOLK, Va. (AP) — A coalition of Hampton Roads state legislators is lining up behind the Atlantic Coast Pipeline. The 33 members of the General Assembly collectively known as the Hampton Roads Caucus expressed their backing for the massive natural gas project in a letter to Virginia’s U.S. senators, Democrats Mark Warner and Tim Kaine.

The pipeline would deliver natural gas from West Virginia and through Virginia and into North Carolina, covering more than 550 miles. The \$5 billion energy project is backed by Dominion Resources and other energy companies. In the letter, the caucus says the region’s natural gas transportation system has “reached a tipping point.” Members describe the pipeline as necessary for the region’s economy.

The Federal Energy Regulatory Commission is reviewing the project.  
<http://marcellus.com/news/id/136009/virginia-lawmakers-back-natural-gas-pipeline/>  
(Marcellus.com) (Associated Press) 3/16/16

### Petrochemical giant Ineos has confirmed its first shipment of shale gas has left the USA bound for Europe.

The Ineos Intrepid left east coast port Philadelphia last week carrying 27,500m<sup>3</sup> of US ethane and is now on its way to Rafnes in Norway. This is the first time that US shale gas has ever been imported into Europe and Ineos plans to start shipments of the gas to its base in Grangemouth later this year.

Over the last couple of years work has been taking place to build ethane storage tanks at Rafnes and Grangemouth. Ineos boss Jim Ratcliffe said: “This is an important day for Ineos – we are nearing the end of a hugely ambitious project that has taken us five years. I am proud of everyone involved in it and I believe that Ineos is one of very few companies in the world who could have successfully pulled this off.”

Ineos plan to use the US shale gas in its two gas crackers at Rafnes and Grangemouth as both fuel and feedstock.  
<http://www.falkirkherald.co.uk/news/local-news/first-ineos-shale-ship-is-underway-1-4075677#ixzz43XbTL2MZ>  
By James Trimble (Falkirk Herald) 3/21/16

### First U.S. Shale Gas Export Reaches Brazil



LNG carrier Asia Vision. Photo credit: Chevron

(Bloomberg) — The tanker carrying the first cargo of natural gas from U.S. shale formations was entering Brazil on Tuesday after leaving Cheniere Energy Inc.’s Sabine Pass terminal in Louisiana on Feb. 24. The liquefied natural gas tanker Asia Vision was arriving at port in Rio de Janeiro, according to shipping data compiled by Bloomberg. Petroleo Brasileiro SA, Brazil’s state-owned energy company, bought the cargo of 3 billion cubic feet at a “market price,” Cheniere said last month.

The shipment comes as a glut of gas flowing out of shale formations led producers to explore foreign markets. It arrives as the global market is dealing with its own surplus of fuel, depressing global prices. While rising supplies and weakening demand threaten to limit future gas exports from the U.S., Cheniere has told U.S. regulators it expects to have shipped as many as eight cargoes from its Sabine Pass terminal by May.

<https://gcaptain.com/first-u-s-shale-gas-export-reaches-brazil/>  
By Harry R. Weber (g Captain) (Bloomberg) 3/15/16

### U.S. proposes new safety rules for natural gas pipelines

A fireball erupts across Interstate 77 from a gas pipeline explosion in Sissonville, W.Va. In the 2012 incident, the stretch of pipeline that ruptured hadn't been inspected or tested for 24 years. Following a series of explosions and accidents the federal government announced Thursday it would expand safety rules for natural gas pipelines. Regulators cited a 2010 explosion in San Bruno, California that left eight people dead and injured more than 50.

"The significant growth in the nation's production, usage and commercialization of natural gas is placing unprecedented demands on the nation's pipeline system," said U.S. Transportation Secretary Anthony Foxx said in a statement.

The Associated Press first reported on the move, which would fall to the DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA). The rules would include pressure-testing on pipelines constructed before 1970, which has been a recommendation National Transportation Safety Board. Safety protocols that currently apply to densely populated areas would be expanded to include those with less population. PHMSA says the proposal would also help reduce the release of greenhouse gases from leaking pipes.

The proposed rules would also regulate, for the first time, rural gathering lines. Currently, all those thousands of miles of smaller pipe that get the gas from the wellhead to major transmission pipelines are not regulated in rural areas, which is where most of them are in Pennsylvania. There are no rules on how deep the lines should be underground, or even if they're buried at all. And they doesn't even have to be marked. No state or federal agency knows how many miles of lines there are, or where they are.

<https://stateimpact.npr.org/pennsylvania/2016/03/18/u-s-to-expand-safety-rules-for-natural-gas-pipelines/>

By Marie Cusick and Susan Phillips (State Impact) 3/18/16

### Natural gas generation first surpassed coal generation on a monthly basis for the first time ever last April.



Photo by Casey Junkins

The American Electric Power Mitchell Plant still burns coal at its Marshall County location, but the company plans to transition Jefferson County's Cardinal Plant to run on natural gas. Now, the administration projects this will cover the entire year. Amid U.S. Environmental Protection Agency regulations such as the Clean Power Plan, as well as the Mercury and Air Toxics Standards, American Electric Power and other generators are beginning to look beyond coal to produce wattage. AEP turned out the lights on 5,535 megawatts of coal-fired power in Appalachia in June, including the former 630-megawatt Kammer Plant in Marshall County.

Furthermore, AEP plans to transition its portion of the Cardinal Plant in Jefferson County to run on natural gas no later than the year 2030, while some generators in Coshocton County will also end coal usage.

"Environmental regulations affecting power plants have played a secondary role in driving coal's declining generation share over the past decade, although plant owners in some states have made investments to shift generation toward natural gas at least partly for environmental reasons. Looking forward, environmental regulations may play a larger role in conjunction with market forces," the EIA report states.

Until 2008, coal supplied about 50 percent of U.S. electricity generation. However, the EIA cites significant shale natural gas production since 2009 as a primary reason coal no longer holds such a commanding cost advantage.

For 2016, the EIA predicts natural gas will generate 33 percent of U.S. electricity this year, with coal accounting for 32 percent.

Nuclear power will constitute 19 percent of the nation's energy portfolio, while renewables such as solar and wind power will generate 8 percent.

<http://www.theintelligencer.net/page/content.detail/id/656493/EIA--Natural-Gas-to-Generate-More-Power-Than-Coal.html?nav=515>

By CASEY JUNKINS - Staff Writer

(The Intelligencer / Wheeling News-Register)

3/20/16



### **Natural gas supply in B.C. dramatically greater than original estimates**

VICTORIA - The British Columbia government says natural gas resources in northeastern B.C., are trillions of cubic feet higher than first thought. A report, published by the National Energy Board, focuses on the Liard Basin, a huge region of northeastern B.C., Yukon and Northwest Territories.

According to the report, 848 trillion cubic feet of natural gas lies under B.C.'s portion of the basin, up from the previous estimate of 210 trillion cubic feet.

A Ministry of Natural Gas Development release says that pushes the province's total natural gas potential above 3,400 trillion cubic feet. That's enough to fuel all natural gas needs across the United States for more than a century, according to 2014 figures from the U.S. Energy Information Administration.

Ministry calculations show that extraction of just 20 per cent of the resource will sustain future development and liquefied natural gas exports in B.C. for the next 160 years.

<http://bc.ctvnews.ca/natural-gas-supply-in-b-c-dramatically-greater-than-original-estimates-1.2819735>

(CTV News Vancouver) (The Canadian Press) 3/16/16

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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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