Natural gas futures rebound after Monday’s 5% drop

Investing.com - U.S. natural gas prices regained strength on Tuesday, one day after plunging more than 5% amid speculation the end of the winter heating season will bring warmer temperatures throughout the U.S. and cut into demand for the fuel. On the New York Mercantile Exchange, natural gas for delivery in April jumped 5.6 cents, or 2.07%, to trade at $2.734 per million British thermal units during U.S. morning hours. Futures were likely to find support at $2.668 per million British thermal units, the low from March 9, and resistance at $2.870, the high from March 6.

On Monday, natural gas for delivery in April sank 16.1 cents, or 5.67%, to settle at $2.678 as weather forecasting models predicted a widespread thaw in the U.S. in the next two weeks.

Market analysts have warned that prices are vulnerable in the near-term as the coldest part of the winter has effectively passed and below-normal temperatures in March mean less than they do in January and February. The heating season from November through March is the peak demand period for U.S. gas consumption. Indications that supplies are more than ample to meet demand also weighed.

Total U.S. natural gas storage stood at 1.710 trillion cubic feet as of last week, 40.4% above year-earlier levels and 7.7% below the five-year average for this time of year. [Link](http://www.investing.com/news/commodities-news/natural-gas-futures-rebound-after-monday%27s-5-drop-331672)

US oil and natural gas rig count drops by 75 to 1,192

Oilfield services company Baker Hughes Inc. says the number of rigs exploring for oil and natural gas in the U.S. fell by 75 this week to 1,192 amid depressed oil prices. Baker Hughes said Friday 922 rigs were seeking oil and 268 were exploring for natural gas, with two listed as miscellaneous. The count is down from a year ago, when 1,792 rigs were active.

Among major oil- and gas-producing states, Texas lost 32 rigs; New Mexico, Oklahoma and Pennsylvania lost seven each; Colorado lost five; North Dakota lost three; Kansas, Louisiana and Utah lost two; and California, Ohio and Wyoming each lost one. Alaska and Arkansas were unchanged, while West Virginia gained one rig. The U.S. rig count peaked at 4,530 in 1981 and bottomed at 488 in 1999. [Link](http://www.thestate.com/2015/03/06/4029968_us-oil-and-natural-gas-rig-count.html?rh=1)

Fiat and Magnetti Marelli sign up to develop natural gas based vehicles

Fiat Chrysler Automobiles, Iveco and Magneti Marelli signed a non-binding MoU with the Prime Minster of Israel’s office, to set up a Fuel Choices Initiative (FCI) for co-operation in development of natural gas based vehicles and technologies.

Fiat Chrysler Automobiles and Iveco have built a reputation for CNG technologies, while Magneti Marelli (also a part of FCA Group) will pitch in with its modern powertrain control solutions. The Italian companies are expected to play a crucial role in developing tailor made alternate fuel technologies and transport systems for Israel which would go a long way in helping the nation keeping its automotive pollution levels and crude oil dependency in check. [Link](http://www.rushlane.com/natural-gas-based-vehicles-fiat-12146951.html)

by Ashwin Ram N P (Rush Lane) 3/9/15
IMPCO Wins EPA Approval for Bi-Fuel GM Truck Conversions
IMPCO Automotive has received Environmental Protection Agency (EPA) certification for the installation of its bi-fuel compressed natural gas (CNG) fuel systems on three General Motors model-year 2015 trucks: the Chevrolet Tahoe 1500, Chevrolet Silverado 1500 and GMC Sierra 1500. The vehicles feature the 5.3-liter EcoTec3 direct-injection engine.

As General Motors’ primary alternative fuel system supplier in North America, IMPCO Automotive says its bi-fuel CNG conversion consists of adaptive calibration technology that ensures a robust and durable product for the end user, while maximizing the efficiency of the CNG.

IMPCO Automotive notes that its bi-fuel pick-up truck offering also includes GM 2500/3500 and Ford-F250 models.

http://www.ngtnews.com/e107_plugins/content/content.php?content.10540#.VP8sqOFwHT8
(NGT News) 3/6/15

Mack Trucks Updates Its Natural-Gas Powered Semi Tractors
Natural gas still hasn’t really caught on as a fuel for private passenger vehicles, but it’s slowly finding more success in commercial applications.

The selection of natural-gas commercial vehicles is much larger, and using the fuel in fleets makes more sense from an environmental-impact standpoint than it does for individual cars.

One company catering to this market is Mack Trucks, which announced that the natural-gas versions of its Pinnacle series trucks will get a handful of updates this year.

All natural-gas Mack Pinnacle models use a Cummins Westport ISX12 G engine that can run on either compressed natural gas (CNG) or liquefied natural gas (LNG).

The two fuels are somewhat different. LNG's liquid state is denser and makes it easier to transport, but CNG is generally cheaper, more widely available, and doesn't need to be kept at low temperature like LNG.

Sales of natural-gas trucks have risen lately, but the economics of the trucking industry still keep them from being widely adopted. While natural gas is typically much cheaper than diesels, the trucks themselves are more expensive to start out with—sometimes by as much as a third over a comparable diesel-powered semi tractor.

Mack claims cheap fuel lowers the lifetime costs of a natural-gas truck, but the relatively quick turnover time of equipment in fleets means the initial buyers often don't see these savings.

Customers also expect fleet operators to pass on cost savings in the form of lower rates, cutting any potential benefit from natural gas.

In addition, there still aren't many public natural-gas fueling stations in the U.S.--and even fewer that can accommodate large trucks.

By Stephen Edelstein (Green Car Reports) 3/9/15
**Ram Expands Bi-Fuel CNG 2500 Truck Models**

*Photo courtesy of FCA US.*

Ram Truck has expanded its bi-fuel compressed natural gas (CNG) 2500 pickup models to include a regular cab and rear-wheel drive configuration, Ram announced at the NTEA Work Truck Show. The new configurations of the Ram 2500 bi-fuel CNG truck will be available by the end of 2015. The vehicle is powered by a 5.7-liter HEMI V-8 equipped with CNG fuel tanks and a choice of eight- or 35-gallon gasoline fuel tanks.

Ram has modified the engine by redesigning the cylinder heads and adding CNG compatible valves and valve-seat materials to allow the burning of either fuel. Unique spark plugs improve combustion and durability, and a unique powertrain control module allows the HEMI to seamlessly operate on either of the two fuel sources, according to Ram.

The system functions automatically by running initially on CNG and shifting to gasoline when that fuel has been fully combusted. The CNG-only range is 301 miles, while the backup supply of gasoline extends the range to 966 miles. The CNG tanks produce a gasoline gallon equivalent of 18.2 gallons.


(Trucking Info) 3/5/15

**Executive advocates for Phila. to become energy hub**

As the chairman of the Greater Philadelphia Energy Action Team (GPEAT), Philip Rinaldi is striving to establish the region as an energy hub.

GPEAT is a coalition of about 80 executives, government officials and leaders from higher education who are pushing for expansion of the energy, petrochemical and manufacturing sectors in the region.

Rinaldi addressed the economic impact and importance of establishing an energy hub in Philadelphia during a Tribune editorial board meeting this week. The energy action team seeks to attract businesses to the area and create a hub by highlighting the region’s six refineries, strong manufacturing history and transportation infrastructure, including the highway system, rail access, seaport and close proximity to Marcellus Shale gas.

“The whole idea behind the energy action team is to create a demand,” said Rinaldi, who is the CEO of Philadelphia Energy Solutions, which he said is the largest oil refinery on the eastern seaboard. Philadelphia Energy Solutions recently filed for a $300 million initial public offering with the Securities Exchange Commission. Rinaldi said GPEAT is pushing for the creation of a new pipeline that would bring natural gas from the Marcellus Shale to the Philadelphia region, which would be used by energy, chemical and manufacturing companies. Rinaldi said he planned to speak to City Council during hearings on how to establish an energy hub in Philadelphia. He said he has a good relationship with Council President Darrell Clarke.

“If you have industrial businesses that consume a lot of natural gas, you need to have that steady supply at a low cost,” Rinaldi said. He noted businesses could use the gas for heat content, metals processing, production of electricity or to convert molecules from the gas into chemicals. “This energy hub is one whose idea says that if you create a pipeline or a series of pipelines, you effectively take the pricing point away from the Marcellus and move it here,” he said.

Rinaldi said the construction of a pipeline that would bring natural gas from the Marcellus Shale to the Philadelphia region, would cost more than $1 billion. He believes the construction costs would be supported by the industry.


Ayana Jones Tribune Staff Writer  (Philadelphia Tribune)  March 7, 2015
Wolf lowering Pennsylvania's LNG tax
Gov. Tom Wolf has effectively lowered a state tax on liquified natural gas by changing the way it is calculated. Wolf announced Thursday that he is rescinding a change that came late last year and effectively raised the tax rate on the fuel. Wolf's decision lowers the rate by 4.3 cents per equivalent gallon.

The immediate impact of the change will be limited. A Department of Revenue spokeswoman said the state estimates there are fewer than 100 commercial trucks running on LNG.

"Given the immediate environmental benefits of fueling trucks with LNG and the future economic gains that will come from further development of the alternative fuels industry in Pennsylvania, it makes no sense to discourage LNG consumption by taxing it at a higher rate," Wolf said.

http://www.bizjournals.com/pittsburgh/blog/energy/2015/03/wolf-lowering-pennsylvaniaslng-tax.html
Sam Kusic, Staff Reporter (Pittsburgh Business Times) 3/6/15

Gov. Wolf’s budget to boost green energy on back of fossil fuels
The $225 million in energy investments also would fund a “last mile” natural gas distribution line fund, which would offer $25 million in matching grants to business parks and manufacturers to construct the remaining miles of pipelines. DEP officials could not provide details on where gas lines might run or how the agency would disburse grants
http://triblive.com/business/headlines/7899220-74/million-energy-budget#axzz3Tz9gVpPM
By Katelyn Ferral (Trib Live) 3/8/15

Shell charters first Harvey Gulf LNG-fuelled OSV
Shell has chartered an LNG-fuelled OSV from Harvey Gulf International Marine for operations in the Gulf of Mexico. The 92m long Harvey Energy operates on three Wärtsilä dual-fuel engines, running on 99% LNG fuel, and will be able to operate for around seven days before refuelling at Harvey Gulf’s new LNG bunkering facility at their terminal at Port Fourchon. Harvey Energy will service Shell’s platforms with equipment and drilling fluids.
By Charlie Bartlett from London (Sea Trade) 3/6/15

Japan Merger to Increase LNG Buyer Power
The combination of two Japanese utilities to form the world's biggest liquefied natural gas importer will give Asian buyers greater muscle to press producers for more flexible contracts and potentially deepen a new era of weaker prices. Tokyo Electric Power Co (Tepco) and Chubu Electric Power Co plan a joint venture from April that would gradually include fuel procurement, investment in gas assets and a potential union of their fossil fuel power plants.
(The Maritime Executive) 3/6/15
Food Companies Leveraging Technology to Drive Down Logistics Costs

Warm fuzzies go with every announced shift away from diesel and toward alternative fuels. Rhetoric about greenhouse gas reductions and sustainable practices accompanies the announcement, but hard-headed business considerations are the real drivers. Volatile petroleum prices are a forecasting headache, making natural gas, either in a compressed or liquid form, an attractive alternative. More importantly, CNG and LNG are significantly less expensive and likely to stay that way.

Positive trials with CNG-powered tractors are driving a major roll-out at Anheuser-Busch to replace more costly distribution by diesel trucks Photo: Anheuser-Busch

Natural gas in a liquid state has more concentrated power, but the octane in gas compressed to 3,600 psi is proving adequate for hauling some of the industry’s heaviest loads. Anheuser-Busch Cos. conducted trials last year with two tractors outfitted with CNG-burning engines, transporting 80,000-lb. cargoes on trucking lanes from its Houston brewery to Dallas and San Antonio. Based on the results, the company ordered additional tractors to replace 66 diesel-powered trucks, according to James Sembrot, senior director-transportation at the St. Louis-based firm.

“Texas has a very high density of compressed natural gas refueling stations, and there are a lot of options for refueling,” says Sembrot in explaining the decision to conduct the trial at the Houston plant.

Outfitting a tractor to burn alternative fuels adds about $45,000 to its cost, most of it associated with the necessary carbon fiber tanks. Fuel-cost savings produce about a two-year payback, and some food companies have sidestepped the issue altogether by working with carriers who supply the trucks. General Mills Inc. began working with Dart Transit Co. in May 2013, using 16 tractors to make deliveries within a 500-mile radius of Minneapolis. The program is a key element in the cereal manufacturer’s goal to reduce diesel fuel consumption by 35 percent.

Energy company IDs shippers for planned natural gas pipeline

The Texas-based energy company that wants to build a natural gas pipeline through southern New Hampshire into Massachusetts announced Thursday that it has lined up utilities and other entities to transport the gas.

Kinder Morgan said its subsidiary, Tennessee Gas Pipeline Company, now has commitments from National Grid, Liberty Utilities, Columbia Gas of Massachusetts, Connecticut Natural Gas Corp. and other anchor shippers to transport about 500 million cubic feet of natural gas per day. The pipeline's capacity is from 1.2 billion to 2.2 billion cubic feet of gas per day.

The gas from the Marcellus Shale fields in the Northeast would travel from Wright, New York, to Dracut, Massachusetts. The Northeast Energy Direct pipeline would stretch across 70 miles of New Hampshire, mostly along an existing power line corridor, to bring gas to markets in New England that currently have limited pipeline capacity and high costs.

By Kevin T. Higgins, Managing Editor (Food Processing) 3/6/15

http://www.foodprocessing.com/articles/2015/supply-chain-logistics/

Energy company IDs shippers for planned natural gas pipeline

The Texas-based energy company that wants to build a natural gas pipeline through southern New Hampshire into Massachusetts announced Thursday that it has lined up utilities and other entities to transport the gas.

Kinder Morgan said its subsidiary, Tennessee Gas Pipeline Company, now has commitments from National Grid, Liberty Utilities, Columbia Gas of Massachusetts, Connecticut Natural Gas Corp. and other anchor shippers to transport about 500 million cubic feet of natural gas per day. The pipeline's capacity is from 1.2 billion to 2.2 billion cubic feet of gas per day.

The gas from the Marcellus Shale fields in the Northeast would travel from Wright, New York, to Dracut, Massachusetts. The Northeast Energy Direct pipeline would stretch across 70 miles of New Hampshire, mostly along an existing power line corridor, to bring gas to markets in New England that currently have limited pipeline capacity and high costs.


(Texas Star Telegram) (The Associated Press) 3/5/15
Sunoco Logistics withdraws public utility petitions for Pa. natural gas pipeline

Sunoco Logistics has withdrawn the last of a series of petitions before the Public Utility Commission that could have exempted its proposed 300-mile Mariner East natural gas pipeline from local zoning ordinances.

The case, which drew opposition from environmental groups and some municipalities, was the subject of a series of hearings and conflicting opinions. It could have set a precedent for how pipelines are regulated and impacted the burgeoning natural gas industry.

“The withdrawal reflects Sunoco Logistics’ commitment and progress in working with various municipalities to meet their needs regarding pump stations and valve sites,” said Jeff Shields, a spokesman for the company, which builds and manages energy infrastructure.

Sunoco Logistic’s $3 billion Mariner East projects will help transport the glut of natural gas from the Marcellus and Utica shale plays across Pennsylvania -- including the midstate region -- to the refineries in Marcus Hook. From there, the gas can be transported to markets across the country and the world.

http://www.pennlive.com/politics/index.ssf/2015/03/pipeline_mariner_east_sunoco.html
By Wallace McKelvey | WMckelvey@pennlive.com (Penn Live) 3/6/15

Study: US chemical exports linked to shale gas may double by 2030

America’s shale gas revolution could lead to dramatic growth in US chemical exports over the next 15 years, according to a new report from Nexant and sponsored by the American Chemistry Council (ACC).

Gross exports of chemical products, including plastics, linked to plentiful and affordable natural gas are projected to double, from $60 billion in 2014 to $123 billion by 2030. The US trade surplus for the selected chemicals is projected to increase from $19.5 billion to $48.3 billion over the same period, with China, Mexico and other Americas remaining the leading net export destinations.

While energy markets are dynamic, the conclusions of the report point to a long-term competitive advantage for US manufacturers on shale gas-advantaged chemicals. It’s a follow-up to 2013’s “Keys to Export Growth for the Chemical Sector,” which identified several policy and regulatory changes that could facilitate billions of dollars in new export growth for the industry.

(Hydrocarbon Processing) 3/9/15

Pennsylvania Gov. Tom Wolf’s administration advances tougher gas drilling rules

In the proposal, agency officials say they want inspectors to undertake more stringent reviews of proposed drilling sites that are within 100 feet of streams or wetlands and require drillers to create site-specific noise control plans.

They also want tougher regulations over waste storage and to require drilling permit applications to analyze how the proposed new well could affect drinking water sources, schools and playgrounds.

On waste storage, the administration wants to eliminate the use of pits to store drill cuttings and wastewater at drilling sites — even though it knows of none in use by the shale drilling industry — and toughen regulations for the centralized impoundments that store wastewater from multiple drilling sites.

The department has said leaks from impoundments prompted the agency’s $4.5 million civil complaint against Pittsburgh-based EQT Corp. last October and a $4.15 million settlement in September with Range Resources Corp. of Fort Worth, Texas.

Under the administration’s proposal, an impoundment would need to be shut down in three years or comply with tougher standards applied to landfills, including a thicker liner, different siting restrictions, higher bonding amounts and a more involved public participation process, said Scott Perry, a deputy agency secretary for oil and gas operations.

The wastewater impoundments play a key role in the recycling of the wastewater, although some companies used tanks instead. Six companies operate 17 impoundments statewide, and the department has received permit applications for 13 more, Perry said.

By Marc Levy, (The Associated Press) (The Times Herald) 3/9/15
Biggest Obstacles To Effective Water Management Named

In preparation for its 5th Annual Marcellus & Utica Shale Water Management Initiative taking place in Pittsburgh, PA on March 23-25, American Business Conferences asked industry professionals working with water in the Marcellus and Utica shale regions to complete a short poll to evaluate what the industry really thinks about water programs in the current cost-sensitive environment.

“We must as an industry work cooperatively to share water sources and reuse water to remain competitive in the current downturn environment,” said Jack Crook, VP EHS of Atlas Energy.

Chad Bruinooge, IOC Operator, Marcellus of Anadarko Petroleum agrees.

“One of the best ways that operators can reduce water handling costs in this current low price environment is by utilizing open communication and networking with the other operators in the area,” said Bruinooge. “This is a new era for the Marcellus play and consequently, we need to open our minds to ideas and concepts that were previously dismissed, as well as evaluate the sharing of resources between operators to secure better pricing and service contracts.” Both Bruinooge and Crook will speak at the event taking place in a fortnight.

A staggering 94% of poll respondents think optimizing water management programs is key to driving down operational costs while a further 71% of respondents believe it is important to achieve 100% reuse of produced water in the Marcellus and Utica.

Fifty three percent of respondents said a lack of technical knowledge was the biggest obstacle preventing them from creating effective water programs. Other obstacles were regulations (35%), operational costs (12%) and vendor costs & manpower.

The 5th annual Marcellus & Utica Shale Water Management Initiative promises to deliver a brand new, multi-platform experience featuring cutting edge E&P case studies and best practices for driving down water management costs.

To find out more about the event, visit: http://www.shale-water-marcellus-utica.com/.
(Water On Line) 3/6/15
Expensive New Ozone Regulation Will Put the Squeeze on Pennsylvania

The Environmental Protection Agency’s (EPA) new ozone regulation could be the most expensive ever issued on the American public, costing the nation $140 billion annually, according to a new analysis by NERA Economic Consulting. This regulation will make it harder to get the necessary permits to manufacture goods and build critical infrastructure like roads and highways in Pennsylvania, while increasing the cost of energy for every business and household in the state. (See details http://www.nam.org/Newsroom/Press-Releases/2015/02/NAM--Proposed-Ozone-Rule-Still-The-Most-Costly/)

The picture gets even worse for the counties in the red and orange in the maps in figure 1.

In these areas, manufacturers won’t be able to expand without a reduction of emissions or shutdown of operations from other plants in the area. Plans for new plants and expansion at existing plants will be shelved. Federal highway funds could freeze and economic growth could grind to a halt.

(National Association of Manufacturers) 3/5/15

New Subscriptions
If you are not currently receiving this newsletter directly, and you would like to be added to the distribution, please send an email to mjc33@psu.edu and enter the words “subscribe SGICC” in the subject line.

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.

William J. Hall, CPG
Director
Shale Gas Innovation and Commercialization Center
Ben Franklin Technology Partners
115 Technology Center Building, University Park, PA 16802
Office: 814 863 4881  Cell: 814 933 8203
billhall@rtto.psu.edu

Mike Chmela, Editor
Shale Gas Innovation and Commercialization Center
Ben Franklin Technology Partners
115 Technology Center Building, University Park, PA 16802
Office: 814.865.6878
mjc33@psu.edu