

October 13, 2014

Natural Gas Trends

Highlights

NGVs make strides in demand, infrastructure

Natural gas vehicles continue to make strides in the heavy-duty and fleet markets, with several recent announcements of long-term fuel and vehicle purchases adding up for this small but growing demand segment.

Clean Energy Fuels said Tuesday that Dillon Transportation has agreed to buy an additional 2.5 million diesel gallon equivalents of compressed natural gas over the next five years. Clean Energy also said it expects to open three more truck-friendly natural gas stations this year, in Houston and Midland, Texas, and West Atlanta, Georgia, to accommodate increasing sales. More than 200 vehicles of Dillon's 500-truck fleet will fuel up with natural gas throughout Clean Energy's public-access network in Texas and Georgia, Clean Energy spokesman Patric Rayburn said in a statement.

"The successful operation of our Dallas Clean Energy station and our current natural gas fleet operations have proven a lower total cost-per-mile than our diesel fleet," Jeff Dillon, president of Dillon Transport, said in a statement. "Converting the rest of our fleet with Clean Energy as our preferred fuel provider is an extension of our successful natural gas fueling track record."

While the size of the US market for natural gas-powered vehicles remains small, it has the potential for substantial growth in the near future, said Henan Xu, an energy analyst with Platts unit Bentek Energy said.

Companies "are adding NCG and LNG trucks to their fleet and fueling stations keep opening up as planned," noted Xu. "The growth is fast. However the proportion of natural gas fueled vehicles is still a small part of the big picture." Xu said the perceived constraint on greater use of natural gas-powered vehicles – a dearth of fueling stations – is being addressed as many companies are quickly building stations to support "decent growth" in NGVs.

For example, Progressive Waste Solutions of Toronto, Ontario, Canada, said recently that it has added about 250 natural gas-powered trucks to its waste and recycling collection fleet since May 2013. The company has a fleet of 400 NGVs that operate in three Canadian markets and seven US markets. The company said in a statement that it expects to have more than 550 NGVs on its routes by the end of 2015. A new waste or recycling collection truck powered by natural gas typically costs about 15% more than a conventional diesel-powered truck, the company said. But because natural gas costs 25% to 50% less than diesel fuel, the company said it "expects a return on this investment within an attractive timeframe."

Texas Railroad Commissioner David Porter said recently that the state's October 2013 natural gas initiative has resulted in \$95 million spent on natural gas vehicles and \$79 million for fueling stations in Texas. The "vigorous market growth is sustainable, because we are addressing both sides of the old 'chicken-and-egg' problem," Porter said in a statement "The problem has been which should come first – more natural gas vehicles or more NGV fueling stations?"

Meanwhile, the Florida Natural Gas Vehicle Coalition said last week there are now 61 active CNG fueling stations in the state with an additional 29 planned. The number of stations operating now "is a 238% increase in NCG fueling stations over two years," the association said in a statement.

The Alternative Fuels Data Center, a branch of the US Department of Energy said this week there are 758 public stations that sell compressed natural gas, and a year ago there were 605 public CNG stations, a 25% increase.

Liquefied natural gas stations have seen even more explosive growth in the past year. According to NGV America, the number of LNG fueling stations nearly doubled in the last year to 59. The main driver behind the growing use of natural gas is the savings incurred by natural gas vehicle owners, Bentek's Xu said. Clean Energy Fuels said that depending on market conditions, CNG or LNG can cost \$1.50/gallon less than gasoline of diesel. Source: Platts Gas Daily

Data

- November 2014 Natural Gas Futures Contract (as of October 10), NYMEX at Henry Hub closed at \$3.859 per million British thermal units (MMBtu)
- November 2014 Light, Sweet Crude Oil Futures Contract WTI (as of October 10), closed at \$85.82 per U.S. oil barrel (Bbl.) or approximately \$14.80 per MMBtu

Last week: Texas warmer than normal

For the week beginning 10/5/14 and ending 10/11/14, cooling degree days (CDD) were higher than normal (warmer) for the week and for the year to date for most Texas cities shown.

Source: www.cpc.ncep.noaa.gov

COOLING DEGREE DAYS (CDD)				
City or Region	Total CDD for week ending 10/11/14	*Week CDD +/- from normal	Year-to-date total CDD	* YTD % +/- from normal
Amarillo	16	5	1513	13%
Austin	90	30	2737	-2%
DFW	86	48	2850	14%
El Paso	44	18	2608	17%
Houston	85	30	2875	6%
SAT	117	55	3298	16%
Texas**	77	30	2596	3%
U.S.**	23	7	1243	6%

* A minus (-) value is cooler than normal; a plus (+) value is warmer than normal. NOAA uses 65° Fahrenheit as the 'normal' basis from which CDDs are calculated. ** State and U.S. degree days are population-weighted by NOAA.

-999 = Normal Less Than 100 or Ratio Incalculable

Last week: U.S. natural gas storage at 3,205 Bcf

For the week ending 10/03/2014 working gas in storage increased from 3,100 Bcf to 3,205 Bcf. This represents an increase of 105 Bcf from the previous week. Stocks were 359 Bcf lower than last year at this time and 378 Bcf below the 5 year average of 3,583 Bcf.

Source: <http://ir.eia.gov/ngs/ngs.html>

U.S. WORKING GAS IN STORAGE				
Region	Week ending 10/03/14	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	1,776	1,714	62	-8.2%
West	464	453	11	-7.9%
Producing	965	933	32	-15.7%
Lower 48 Total	3,205	3,100	105	-10.5%

Lower 48 states, underground storage, units in billion cubic feet (Bcf)

Last week: U.S. gas rig count down for the week

The gas rig count for the U.S. was down ten for the week and down 49 when compared to twelve months ago. The total rig count for the U.S. was down eight from last week and was up 187 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

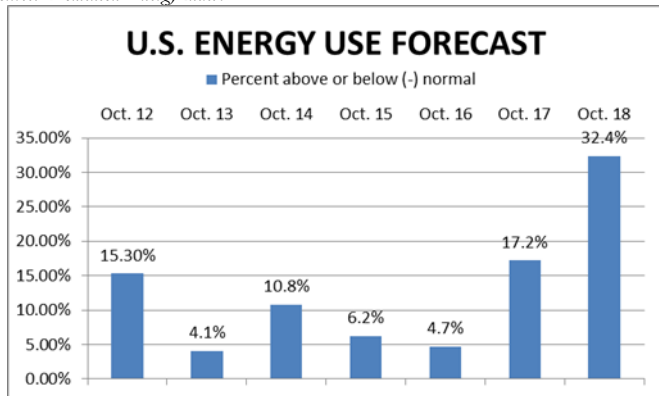
Source: Baker Hughes

BAKER HUGHES ROTARY RIG COUNT				
	As of 10/10/2014	+/- prior week	Year ago	+/- year ago
Texas	896	1	822	74
U.S. gas	320	-10	369	-49
U.S. oil	1609	18	1367	242
U.S. total	1930	8	1743	187
Canada	420	-10	357	63

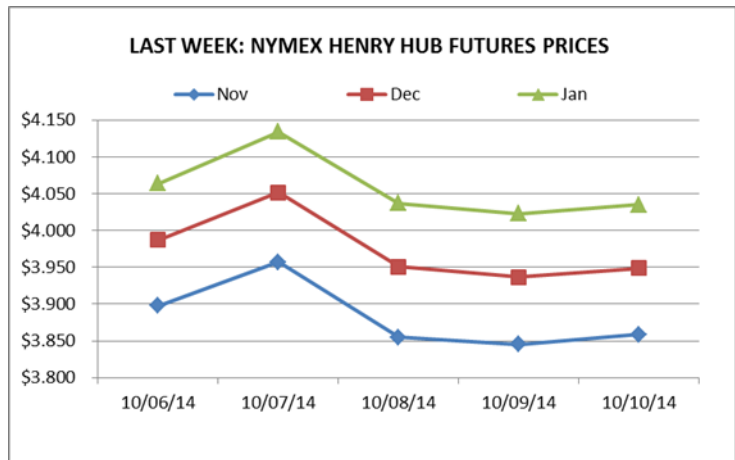
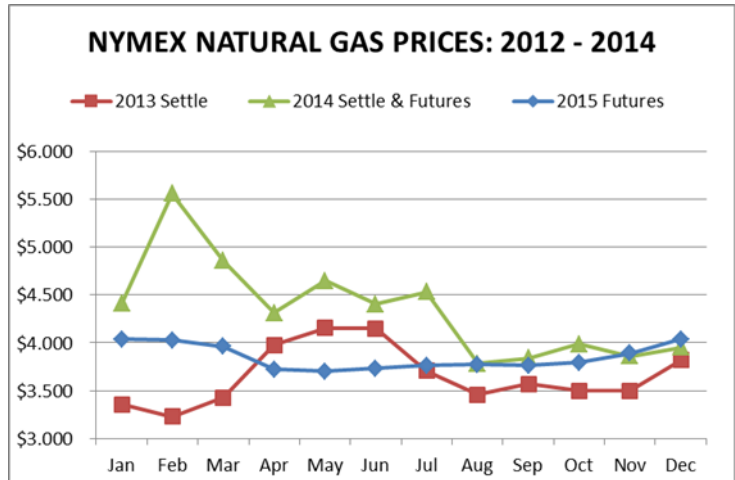
This week: U.S. energy above normal

U.S. energy use is predicted to be above normal this week, according to the Dominion Energy Index, as shown below. Dominion forecasts total U.S. residential energy usage, a component of which is natural gas.

Source: Dominion Energy Index



2014 prices. Natural gas prices for 2014, shown below in green, are the NYMEX settlement prices for Jan.-Oct. and futures prices for the remainder of the year.



NATURAL GAS PRICE SUMMARY AS OF 10/10/2014

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US Nov. futures				
NYMEX	\$3.859	-\$0.180	\$0.361	\$3.863