

April 22, 2013

# Natural Gas Trends

## Highlights

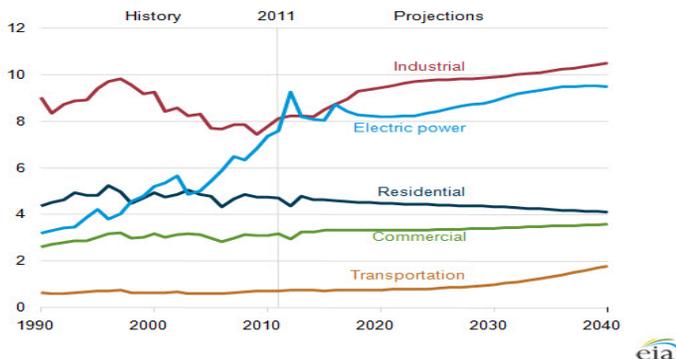
### Industrial and electric power sectors lead U.S. growth in natural gas consumption:

According to the EIA's 2013 Annual Energy Outlook, U.S. total natural gas consumption grows from 24.4 trillion cubic feet in 2011 to 29.5 trillion cubic feet in 2040 in the AEO2013 Reference case. Natural gas use increases in all the end-use sectors except residential, where consumption declines as a result of improvements in appliance efficiency and falling demand for space heating, attributable in part to population shifts to warmer regions of the country.

Despite falling early in the projection period from a spike in 2012, which resulted from very low natural gas prices relative to coal, consumption of natural gas for power generation increases by an average of 0.8 percent per year, with more natural gas used for electricity production as relatively low prices make natural gas more competitive with coal. Over the projection period, the natural gas share of total power generation grows, while the coal share declines.

Natural gas consumption in the industrial sector increases by an average of 0.5 percent per year from 2011 to 2040. This includes 0.7 trillion cubic feet of natural gas used in GTL (gas to liquids), which is largely consumed in the transportation sector. Industrial output grows as the energy-intensive industries take advantage of relatively low natural gas prices, particularly through 2025. After 2025, growth in the sector slows in response to rising prices and increased international competition.

Figure 85. Natural gas consumption by sector, 1990-2040 (trillion cubic feet)



[www.eia.gov/forecasts/aeo/MT\\_naturalgas.cfm#natgas\\_prices](http://www.eia.gov/forecasts/aeo/MT_naturalgas.cfm#natgas_prices)

## Data

- May 2013 Natural Gas Futures Contract (as of Apr. 19), NYMEX at Henry Hub closed at \$4.408 per million British thermal units (MMBtu)
- May 2013 Light, Sweet Crude Oil Futures Contract WTI (as of Apr. 19), closed at \$88.01 per U.S. oil barrel (Bbl.) or approximately \$15.14 per MMBtu

### Last week: Texas cooler and U.S. warmer than normal

For the week beginning 4/14/13 and ending 4/20/13, heating degree days (HDD) were higher than normal (cooler) for Texas and lower than normal (warmer) for the US.

HEATING DEGREE DAYS (HDD)				
City or Region	Total HDD for week ending 4/20/13	*Week HDD +/- from normal	Year-to-date total HDD	* YTD % +/- from normal
Amarillo	83	18	3555	-14%
Austin	23	16	1616	-1%
DFW	26	11	1967	-16%
El Paso	26	5	2162	-14%
Houston	19	10	1163	-23%
SAT	13	6	1179	-25%
Texas**	24	9	1711	-13%
U.S.**	77	-1	4067	-4%

\* A minus (-) value is warmer than normal; a plus (+) value is cooler than normal. NOAA uses 65° Fahrenheit as the 'normal' basis from which HDDs 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 1,704 Bcf

For the week ending 4/12/2013 working gas in storage increased from 1,673 Bcf to 1,704 Bcf. This represents an increase of 31 Bcf from the previous week. Stocks were 794 Bcf lower than last year at this time and 74 Bcf below the 5 year average of 1,778 Bcf.

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

U.S. WORKING GAS IN STORAGE				
Region	Week ending 4/12/13	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	665	646	19	-12.3%
West	336	337	-1	24.9%
Producing	703	690	13	-6.4%
Lower 48 Total	1,704	1,673	31	-4.2%

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

**Last week: U.S. gas rig count up 2**

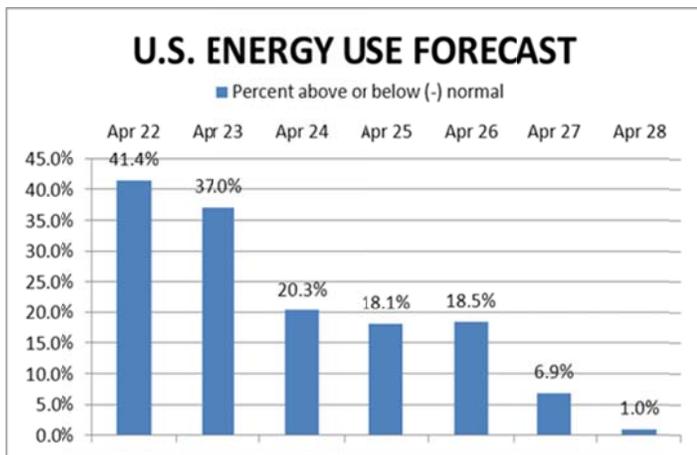
The gas rig count for the U.S. was up 2 when compared to the prior week and down 252 when compared to 12 months ago. The total rig count for the U.S. was down 13 for the week and down 214 when compared to 12 months ago. The total rig count includes both oil and natural gas rotary rigs. Source: Baker Hughes

BAKER HUGHES ROTARY RIG COUNT				
	As of 4/19/2013	+/- prior week	Year ago	+/- year ago
Texas	837	-11	929	-92
U.S. gas	379	2	631	-252
U.S. oil	1371	-16	1337	34
U.S. total	1758	-13	1972	-214
Canada	126	-30	146	-20

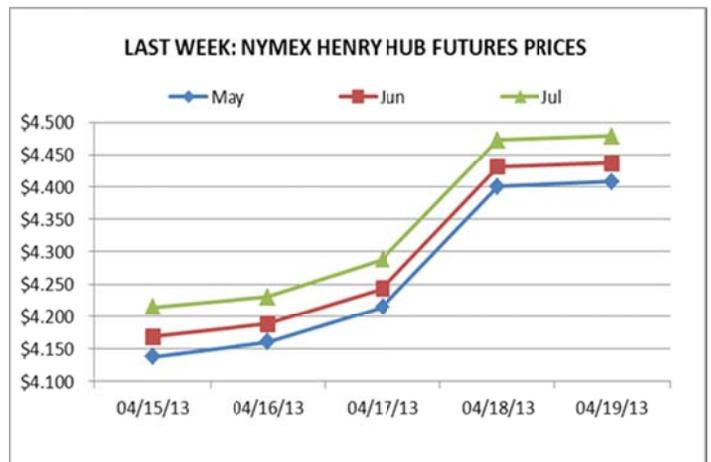
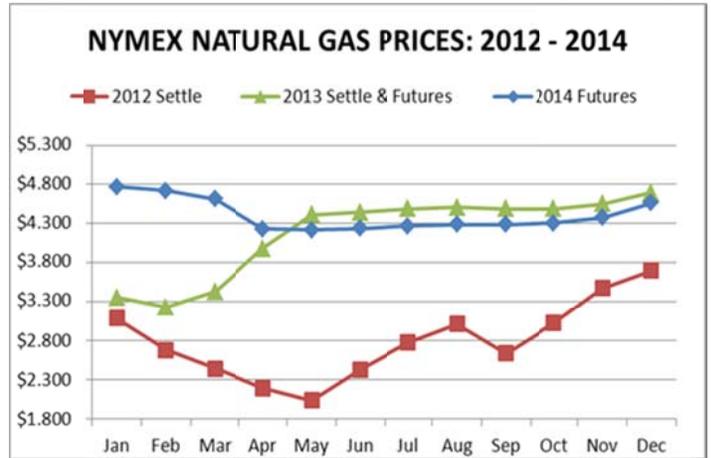
Numbers are excerpted and not meant to be totaled

**This week: U.S. energy use above normal**

U.S. energy use is predicted to be above normal throughout the 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



2013 prices. Natural gas prices for 2013, shown below in green, are the NYMEX settlement prices for January-April and the futures prices for the remaining months of 2013.



**NATURAL GAS PRICE SUMMARY AS OF 4/19/2013**

This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
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US May futures

NYMEX	\$4.408	\$0.186	\$2.372	\$4.528
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