

**December 17, 2012**

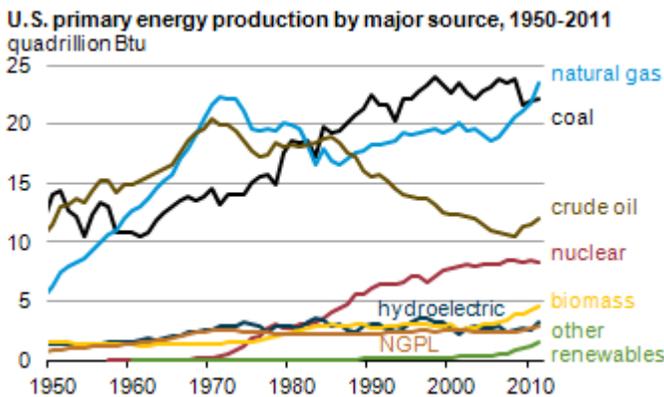
# Natural Gas Trends

## Highlights

### FOR MOST FUEL SOURCES DOMESTIC PRODUCTION HAVE BEEN INCREASING

In 2011, the United States produced about 78 quadrillion Btu (quads) of energy, more than at any point in the nation's history. More than three-quarters of this energy production came from nonrenewable fossil fuels: coal, natural gas, crude oil, and natural gas plant liquids. Despite rising production, the United States was a net energy importer, consuming more than 97 quads of energy in 2011.

The 60.6 quads of domestic fossil fuel production set a record, exceeding the previous peak of 59.3 quads in 1998. **Of those fuels, natural gas surpassed coal as the most-produced fuel with 23.5 quads compared to coal's 22.2 quads.** Production of crude oil, which experienced a long decline from 20.4 quads in 1970 to 10.5 quads in 2008, rose to almost 12 quads in 2011. Natural gas plant liquids (NGPL), which are distinct from 'dry' natural gas, rose to their highest level of 2.9 quads.



Other fuels also experienced record production levels in 2011. Biomass, which includes wood and wood-derived fuels, biomass waste, and biomass inputs to the production of ethanol and biodiesel, increased to 4.5 quads. Other nonhydroelectric renewable energy increased to 1.6 quads, mostly from wind (1.2 quads), with the balance from geothermal and solar-photovoltaic.

The other fuel sources remained at their recent product levels: nuclear electric power contributed 8.3 quads, maintaining its position as the nation's largest nonfossil fuel energy source, and hydroelectric power contributed 3.2 quads.

#### Source

<http://www.eia.gov/todayinenergy/detail.cfm?id=9190#>

## Data

- January 2013 Natural Gas Futures Contract (as of Dec. 14), NYMEX at Henry Hub closed at \$3.314 per million British thermal units (MMBtu)
- November Light, Sweet Crude Oil Futures Contract (as of Dec. 14), NYMEX at Cushing closed at \$86.78 per U.S. oil barrel (Bbl.) or approximately \$13.81 per MMBtu

### Last week: U.S., Texas warmer than normal

For the week beginning 12/8/12 and ending 12/14/12, heating degree days (HDD) were lower than normal for Texas and lower than normal for the U.S. In fact for almost all the entities we monitor HDDs were lower than normal.

Source: [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)

HEATING DEGREE DAYS (HDD)				
City or Region	Total HDD for week ending 12/15/12	*Week HDD + / - from normal	Year-to-date total HDD	* YTD % +/- from normal
Amarillo	170	-24	909	-30%
Austin	92	4	360	-13%
DFW	115	-9	433	-30%
El Paso	139	0	459	-40%
Houston	75	-5	249	-36%
SAT	82	-3	266	-34%
Texas**	99	-3	396	-25%
U.S.**	154	-25	1167	-10%

\* 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 3,806 Bcf

For the week ending 12/7/2012 working gas in storage increased from 3,804 Bcf to 3,806 Bcf. This represents an increase of 2 Bcf from the previous week. Stocks were 48 Bcf higher than last year at this time and 283 Bcf above the 5 year average of 3,523 Bcf.

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

U.S. WORKING GAS IN STORAGE				
Region	Week ending 12/7/12	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	1,974	1,986	-12	2.2%
West	547	545	2	14.7%
Producing	1,285	1,273	12	15.4%
Lower 48 Total	3,806	3,804	2	8.0%

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

**Last week: U.S. gas rig count down 1**

The gas rig count for the U.S. was down 1 when compared to the prior week and down 402 when compared to 12 months ago. The total rig count for the U.S. was down 1 for the week and down 220 when compared to 12 months ago. The total rig count includes both oil and natural gas rotary rigs.

Source: Baker Hughes

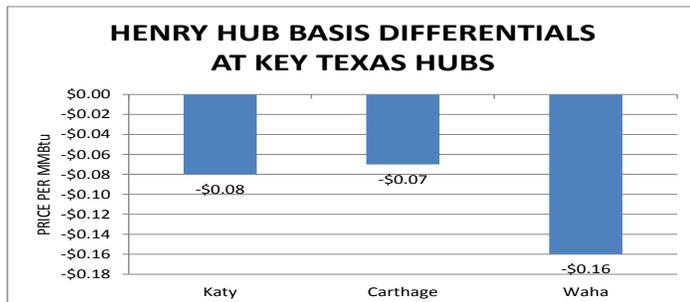
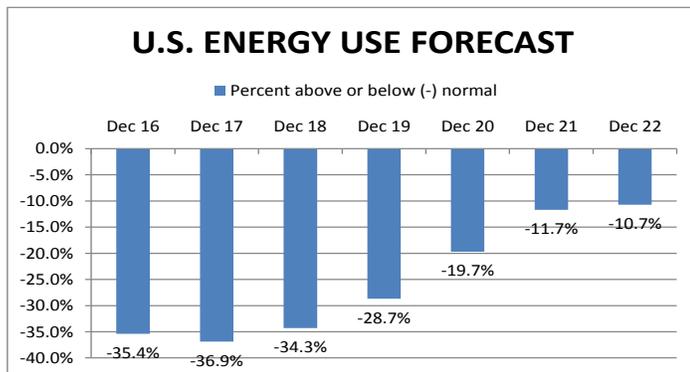
	As of 12/14/2012	+/- prior week	Year ago	+/- year ago
Texas	848	-5	919	-71
U.S. gas	416	-1	818	-402
U.S. oil	1381	-1	1196	185
U.S. total	1799	-1	2019	-220
Canada	418	12	531	-113

Numbers are excerpted and not meant to be totaled

**This week: U.S. energy use sharply below normal**

U.S. energy use is predicted to be below normal throughout the week of December 16. 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



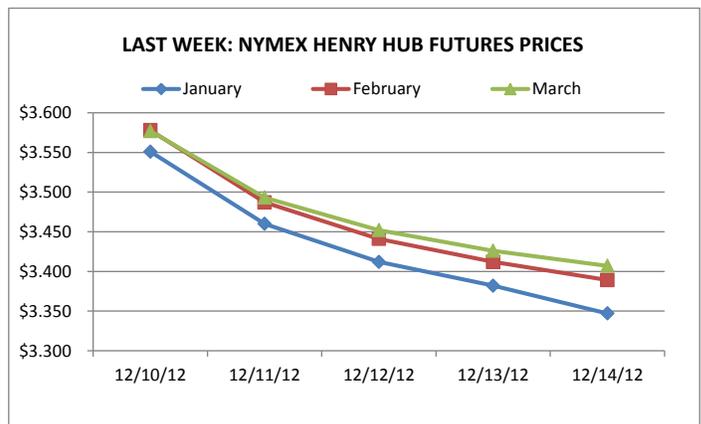
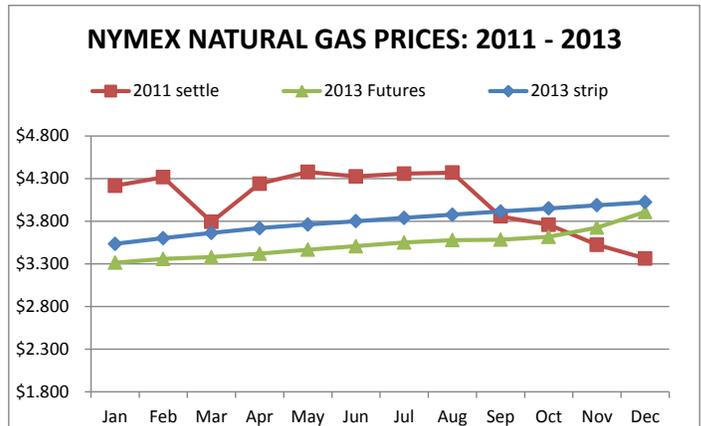
**NATURAL GAS PRICE SUMMARY AS OF 12/14/2012**

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

US January futures

NYMEX	\$3.314	-\$0.237	-\$0.445	\$3.457
-------	---------	----------	----------	---------

**Strip prices.** Natural gas strip prices for 2013, shown below in blue, are the average of daily settlement prices for the next twelve months of natural gas futures contracts.



Gary M. Torrent Ph.D.  
 a natural gas analyst in the Market Oversight Section of the Gas Services Division, is editor of Natural Gas Trends. Comments on this publication may be directed to Dr. Torrent at 512.463.7395 or gary.torrent@rrc.state.tx.us