

Natural Gas Quarterly Update



January to March 2024

This document uses data from the Pennsylvania Department of Environmental Protection (DEP), the U.S. Energy Information Administration (EIA) and Natural Gas Intelligence to provide a quarterly update on natural gas production and prices. The table below shows recent trends in quarterly unconventional production volume, well counts and average spot prices for Pennsylvania.

Natural Gas Summary: 2024 Q1					
	2023				2024
	Q1	Q2	Q3	Q4	Q1
Production Volume	1,845	1,865	1,871	1,939	1,881
Growth Rate	-0.4%	0.7%	-0.5%	4.5%	1.9%
New Wells Spud	120	89	102	110	100
Annual Change	-27	-45	-56	-26	-20
Average PA Price	\$2.25	\$1.45	\$1.31	\$1.69	\$1.69
Growth Rate	-45.0%	-78.3%	-81.1%	-62.8%	-24.9%

Note: Growth rates are year-over-year. Production is in billion cubic feet, horizontal wells only. Average PA price (in \$/MMBtu), is a weighted average spot price at two major PA hubs.
Source: Production volume and well counts are reported by DEP. Price data are from Natural Gas Intelligence.

Notable trends for 2024 Q1 include:

- **Production volume** totaled 1,881 billion cubic feet, an increase of 1.9% from the prior year. Despite deceleration from the prior quarter, the 2024 Q1 growth rate is an uptick from the overall rate for calendar year 2023 (+1.0%).
- There were 100 **new horizontal wells spud**, a decrease of 20 new wells (-16.7%) from the prior year. This was the sixth consecutive quarter with a year-over-year (YOY) decline in new wells spud. Preliminary data for April and May show that new wells were flat from the same period in 2023.
- The **average Pennsylvania spot price** was \$1.69, a decrease of \$0.56 (-24.9%) from the prior year. Regional and national prices have been constrained in recent quarters due to unusually high storage levels. According to the EIA Weekly Natural Gas Storage Report, U.S. natural gas storage at the end of 2024 Q1 was 23.4% higher than the prior year. Furthermore, national storage levels for 2024 Q1 were the highest for a first quarter since 2016. Storage levels have increased as national production outpaced demand, largely due to warmer winters.

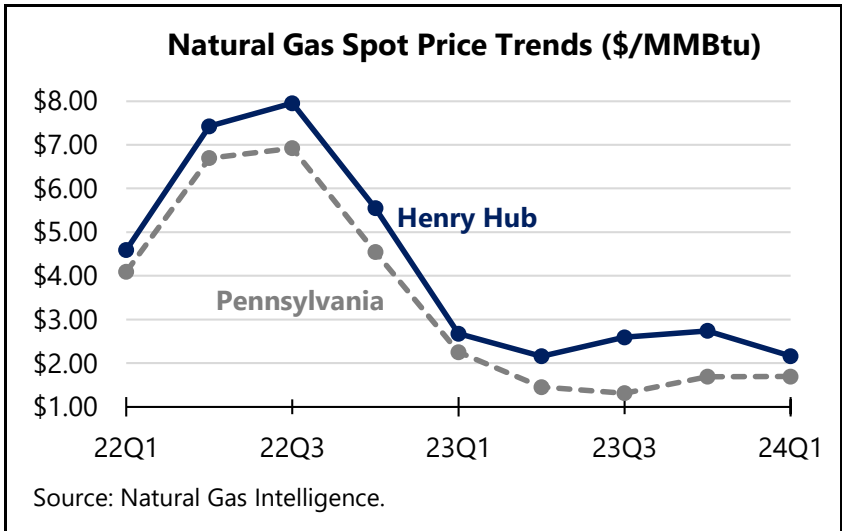
The table below compares YOY growth in quarterly production volume in Pennsylvania to seven large production states and the U.S. The states are listed in descending order based on total production volume in 2024 Q1. The eight states shown account for 86% of nationwide natural gas production. For Pennsylvania, these data differ from the prior page because they include natural gas production from all sources and well

types (e.g., conventional). For 2023, production growth in Pennsylvania lagged most top-producing states. For 2024 Q1, Pennsylvania production growth continued to lag Texas and the U.S. Nationwide production growth has outpaced Pennsylvania in recent quarters due to gains in Texas, Alaska and West Virginia.

State	2023				2024
	Q1	Q2	Q3	Q4	Q1
Texas	6.2%	6.6%	6.2%	7.2%	6.2%
Pennsylvania	-0.4	1.4	0.6	4.2	1.2
Louisiana	17.0	7.9	3.0	-2.6	-7.9
Alaska	25.3	18.5	16.4	24.0	1.4
West Virginia	10.4	9.3	10.4	13.4	11.4
New Mexico	0.2	0.8	-9.1	-11.1	11.7
Oklahoma	9.6	1.4	-0.9	-1.6	-3.1
Ohio	3.3	1.2	-0.2	-0.9	-4.6
U.S.	5.5	4.5	2.7	4.1	3.0

Source: U.S. Energy Information Administration.

The adjacent figure displays recent trends in natural gas spot prices for the Henry Hub and the average Pennsylvania hub price. For 2024 Q1, the Pennsylvania average was \$1.69 and the Henry Hub was \$2.16, both registering declines from the prior year. The Henry Hub average price for March was \$1.50 per MMBtu, the lowest monthly price since data have been reported (1997). Data for April show that the Pennsylvania average hub price was \$1.34 and the Henry Hub was \$1.59.



Staff Contact

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