



Tall Tales about Deep Wells: Part 1 of a Series

Yes, Virginia, There is a Natural Gas Boom in West Virginia

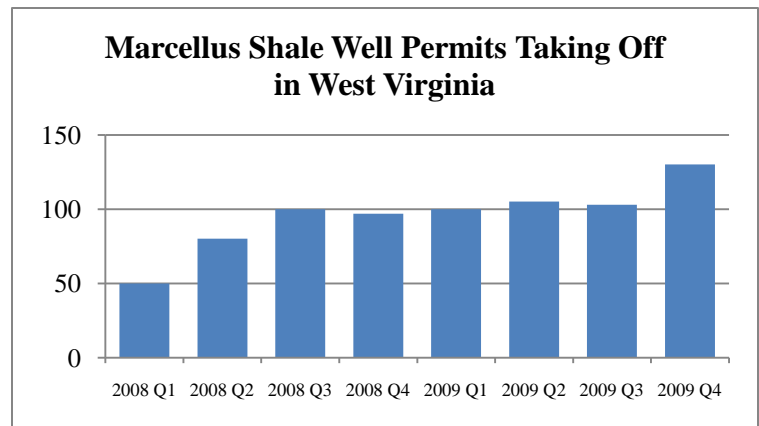
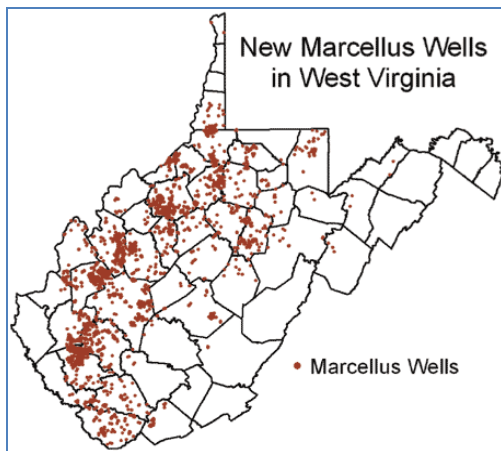
Pennsylvania Budget and Policy Center • 412 North 3rd Street, Harrisburg, PA 17101
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There is a natural gas boom in the Marcellus Shale. It's happening in West Virginia.

The natural gas industry has argued that the surge in natural gas drilling in the Marcellus Shale in Pennsylvania is unique and that a tax will impede further growth. In fact, neighboring West Virginia is also experiencing growth in drilling activity, investment, and jobs. Unlike Pennsylvania, it is also collecting new tax revenue. West Virginia has levied corporate, severance, and local property taxes on natural gas extraction for many years, yet production has been higher than in Pennsylvania and continues to increase.

West Virginia is a Major Player in the Marcellus Shale

According to the U.S. Department of Energy, more Marcellus Shale wells have been drilled in West Virginia than in Pennsylvania (957 to 768)¹ through 2009, and applications for new permits are on the rise. Officials with the West Virginia Department of Environmental Protection (DEP) have said that growth has outpaced its ability to keep up, citing the inadequacy of 18 inspectors to keep tabs on over 1,000 new wells and tens of thousands of existing ones.²



Sources. State of West Virginia (left); CONSOL Energy (right).

¹ Technology & Management Services and All Consulting, LLC, *Projecting the Economic Impact of the Marcellus Shale Gas Development in West Virginia: A Preliminary Analysis Using Publicly Available Data*, U.S. Department of Energy - National Energy Technology Laboratory, DOE/NETL- 402033110, March 31, 2010.

² Associated Press, "DEP may need 2nd framework to handle gas rush," *Charleston (WV) Gazette*, September 3, 2010 <http://www.wvgazette.com/ap/ApTopStories/201009030146>.

Big Oil and Gas Companies are Investing in West Virginia's Marcellus Shale

- **Chesapeake Energy**, the second largest producer in the Marcellus Shale, has established its Eastern Division regional office, which oversees operations in the entire Appalachian basin, in Charleston.³ In 2008, Chesapeake Appalachia, LLC produced 33.4 billion cubic feet of natural gas in West Virginia.⁴
- **EQT Corporation**, Appalachia's largest natural gas exploration and production company, based in Pittsburgh, currently operates 59 Marcellus Shale wells and 65 Huron/Berea wells in West Virginia.⁵ EQT produced 33.1 billion cubic feet of natural gas in West Virginia in 2008.
- **CONSOL Energy**, a giant producer of coal and natural gas, purchased Dominion's natural gas production operations in March 2010, noting that yields from West Virginia shale wells were on par with those in southwestern Pennsylvania.⁶ The assets acquired by CONSOL in West Virginia produced more than 32 billion cubic feet of natural gas in 2008.
- **Cabot Oil and Gas** owns leasing rights to more than 700,000 acres in West Virginia and is expanding its Marcellus Shale drilling in the state.⁷ Cabot extracted 28.5 billion cubic feet of natural gas in West Virginia in 2008.

"We have seen a big increase in tractor sales, farm equipment sales, grass seed for reseeded at the drilling sites, straw for reseeded and other items. It's a better year than 2009 for sure. Our counter is swamped every day with residents and representatives from the drilling companies. In fact, our parts and counter people are about done in. We've been extremely busy."

- **Karen Knight, a partner at Knights Farm Supply in Glen Easton, W.Va.**⁸

³ Chesapeake Energy Web site, <http://chk.aitrk1.com/careers/chesapeake-locations/pages/regional-offices.aspx>.

⁴ 2008 company production figures in this section come from West Virginia Oil and Gas Association *2010 Fact Book*.

⁵ EQT Corporation, Analysts Presentation to the Oil & Gas Conference, August 24, 2010, <http://files.shareholder.com/downloads/EQT/1001875746x0x397412/54907426-c16c-4cc8-a56f-56821b445131/EQT%20Corporation%20Presentation%20-%20The%20Oil%20&%20Gas%20Conference>.

⁶ CONSOL Energy, "CONSOL Energy: Strategic Acquisition of Dominion's Appalachian's E&P Business," March 15, 2010, <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9MzczMzA3fENoaWxkSUQ9MzcwNjE5fFR5cGU9MQ==&t=1>.

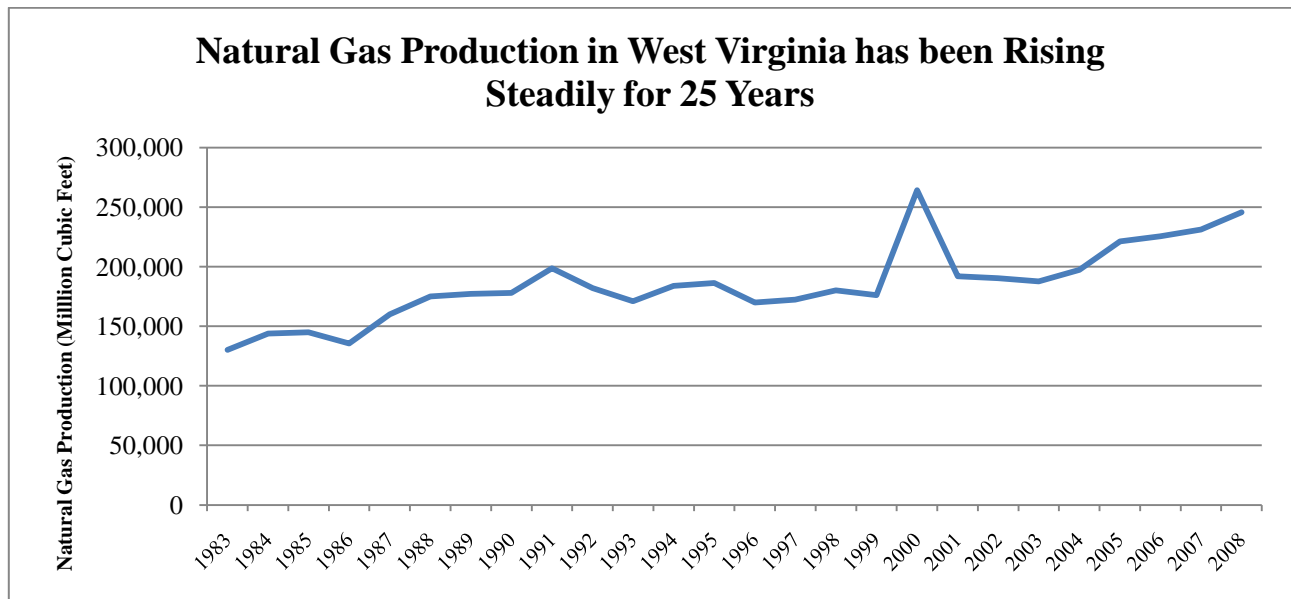
⁷ Cabot Oil & Gas, *2009 Annual Report*, http://www.cabotog.com/pdfs/2009_cogAR.pdf.

⁸ Casey Junkins, "400 Seek Deal: Major Gas Lease Focus," *The Intelligencer/Wheeling News-Register*, July 18, 2010 <http://www.theintelligencer.net/page/content.detail/id/539855.html?nav=5233>.

“Hundreds Want Gas Drilling Jobs” reported a recent Wheeling newspaper article describing a Chesapeake Energy job fair. A Chesapeake recruiter noted, “We are not only hiring for this area, but the entire Eastern Division.”⁹

Natural Gas Extraction Nothing New in West Virginia

Natural gas has been produced in West Virginia for almost as long as it has in Pennsylvania. The state has fewer total wells, but those wells have been more productive, and volume has grown over time. West Virginia out-produces Pennsylvania in natural gas by 24%, according to the U.S. Energy Information Administration.¹⁰ West Virginia has imposed a severance tax since 1925 and in 2005 increased its rate to 5% of the sales price plus \$0.047 per thousand cubic feet (MCF).



Source. U.S. Department of Energy, Energy Information Administration.

“So that West Virginia program is looking really, really good to us at this point in time.”
- Murry Gerber, then EQT CEO, February 6, 2010¹¹

⁹ Kef O. Howard, “Hundreds Want Gas Drilling Jobs,” *The Intelligencer/Wheeling News-Register*, August 19, 2010 <http://www.theintelligencer.net/page/content.detail/id/540871.html?nav=515>.

¹⁰ U.S. Department of Energy, Energy Information Administration, (2008 data is the most recent available from EIA).

¹¹ Pam Kasey, “Character of Marcellus Shale Gas Play Becoming Clearer,” *The (West Virginia) State Journal*, February 6, 2010 <http://www.statejournal.com/story.cfm?func=viewstory&storyid=74726>.

Drillers Pay Their Share ... in West Virginia

The taxes collected by state and local governments on West Virginia natural gas production have been increasing, although the price has dropped from a high of \$11.32 per MCF in July 2008. West Virginia funds about 2% of its \$3.7 billion General Fund with natural gas severance taxes. These taxes have been critical in financing schools, health care, and other services for West Virginia's 1.8 million residents.

Year	Total Severance Tax	Local Share of Severance Tax	Property Taxes
2007	\$67.6 million	\$6.7 million	\$52.0 million
2008	\$71.3 million	\$7.2 million	\$55.6 million
2009	\$85.5 million	\$16.0 million	\$97.2 million

Source. West Virginia Oil and Natural Gas Association, *2010 Fact Book*.

Conclusion

Imposing sensible taxes on natural gas extraction hasn't hampered West Virginia's natural gas industry. There is no reason to think Pennsylvania would be different.