

The Appalachian Basin – A World-Class Resource

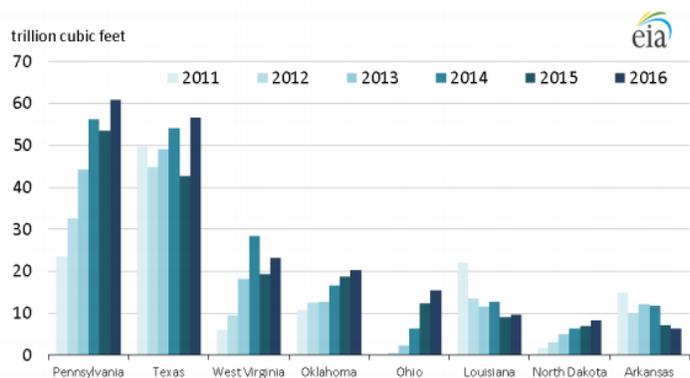
“Marcellus and Utica natural gas is rich in liquids, including ethane, making the region attractive for chemical manufacturers.” – EIA, [1/26/18](#)

PRODUCTION & PROVED RESERVES

- According to U.S. Energy Information Administration (EIA) [data](#), the Appalachian Basin, which consists of the Marcellus and Utica Shale plays beneath Ohio, West Virginia, and Pennsylvania, leads the United States in natural gas production with 27,150 mcf/d, **nearly double the production of the Permian and Eagle Ford basins in Texas**. As EIA reported in [December 2017](#), shale gas production in the Appalachia region has increased rapidly since 2012, **driving an overall increase in U.S. natural gas production**.
 - If Ohio, West Virginia, and Pennsylvania were a country, it would be the **world’s third-largest natural gas-producing nation**, with 8 Tcf of combined production in 2016. (Analysis of State Production Data)
 - Between 2012 and 2015, the **Appalachian Basin accounted for 85 percent of U.S. shale gas production growth**. (EIA, [7/28/15](#))
 - Appalachian NGL production is **projected to increase over 700 percent in the 10 years** from 2013 to 2023. (DoE, [12/17](#))
- According to U.S. Department of Energy (DoE) [estimates](#), the Appalachian Basin has 85.1 Tcf estimated proved shale gas reserves, representing 53 percent of the U.S. total. **West Virginia, Pennsylvania, and Ohio are three of the nation’s top five largest shale gas reserve states**. Combined, they have double Texas’ proved reserves.

Region	Gas production million cubic feet/day		
	February 2018	March 2018	change
Anadarko	6,131	6,100	(31)
Appalachia	26,829	27,150	321
Bakken	2,220	2,248	28
Eagle Ford	6,456	6,518	62
Haynesville	7,906	8,095	189
Niobrara	4,813	4,860	47
Permian	9,754	9,970	216
Total	64,109	64,941	832

Figure 13. Proved shale gas reserves of the top eight U.S. shale gas reserves states, 2011–16



Source: U.S. Energy Information Administration, Form EIA-23L, Annual Report of Domestic Oil and Gas Reserves, 2011–16

LIQUIDS PROCESSING

- Between 2010 and 2017, natural gas liquids (NGL) production in the Appalachian basin **expanded from 106,000 b/d to 621,000 b/d**, according to EIA [data](#). As DoE [reports](#), this **growth of NGL production accounts for a third of total U.S. increased NGL production** over the seven years.
- Alongside rapid growth in liquids production, the Appalachian Basin’s fractionation capacity – the technology to separate NGLs – **has increased from 41,000 b/d in 2010 to 850,000 b/d in 2016**. The DoE [projects capacity will grow to as much as 1.1 million b/d in 2019](#).