




Powering West Virginia

The mining and production of traditional energy resources, like natural gas, have supported communities throughout West Virginia for generations and have been integral in bringing affordable energy to the rest of the country for years. Now, based on an economic model designed by Orion Strategies, Consumer Energy Alliance (CEA) has released a new study showing that natural gas production in the state has saved West Virginia energy consumers nearly \$4.3 billion over a decade.

It's sometimes difficult to understand those savings. Oftentimes, because energy is so accessible, many people do not stop to consider how energy resources really affect our daily lives. Affordable energy not only ensures that we are able to turn the lights on in our homes at night or heat and cool our homes from season to season, but energy also enabled over 15 million visitors to travel via car or plane to our state in 2017.¹ Energy is also essential for West Virginia's farmers to harvest and transport food from their farms to our tables. Energy also allows West Virginia's healthcare industry to provide better patient care with advanced medical equipment. These consumer benefits are possible because of the production of West Virginia's natural resources and its ability to be transported through pipeline infrastructure which provides millions of dollars annually to fund our schools, hospitals, roads and sustain our communities. In short, having access to reliable and affordable energy on demand is essential to keeping our busy lives and our state's industries moving.

CEA works to support and advocate for the continued development of natural gas and other traditional and alternative energy sources as well as transportation infrastructure like pipelines and transmission lines that move this energy throughout the state of West Virginia. It is important for our state's elected officials to embrace the benefits and growth potential that energy production brings to families, schools, and factories across the state.

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**\$4.3
BILLION**

West Virginia
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between 2006
and 2016



Affordable Energy for West Virginians

Many American families struggle daily to pay for rising energy costs. According to a 2015 survey by the U.S. Energy Information Administration, nearly one-third of American households struggled to pay their energy bills to light, heat and cool their homes. The survey found that roughly “one in three households reported reducing or forgoing basic necessities like food and medicine to pay an energy bill, and 14 percent reported receiving a disconnection notice for their energy service. Households also used less energy than they would prefer to – 11 percent of households surveyed reported keeping their home at an unhealthy or unsafe temperature.”²

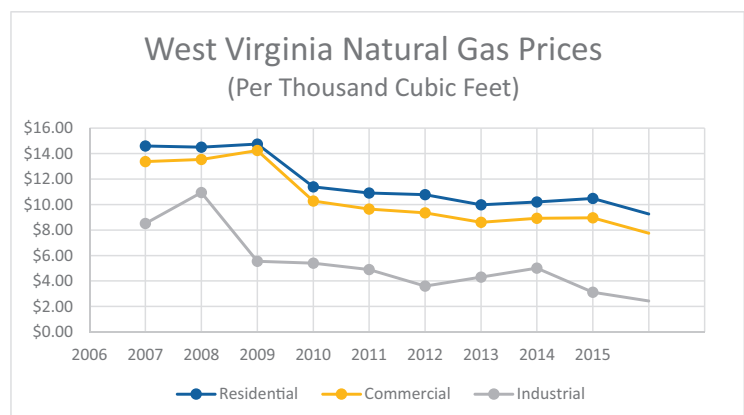
In West Virginia, over 319,000 people, 17.9 percent of the state’s population, live in poverty.³ In fact, West Virginia is ranked as the 12th most expensive state in the U.S. for energy expenditures. On average, each West Virginian spent \$3,910 for their energy needs in 2016.⁴ For those living at or below the poverty line, this translates to roughly one-third of their income going toward energy expenses.⁵

But it’s not just lower income families that face energy insecurity. Across the nation, more and more families are living paycheck to paycheck – with little to no savings. A January 2018 survey by Bankrate found only 39 percent of Americans had \$1,000 saved to cover a financial emergency. CNBC recently reported that “69 percent of Americans had less than \$1,000 in total savings and 34 percent had no savings at all.”⁷

West Virginia’s Abundant Energy Resources

While coal has long been the energy mainstay for West Virginia, natural gas is also another abundant resource in the state making West Virginia home to the fourth largest natural gas reserves in the nation. Having this additional resource is good news. In 2012, the state’s coal industry suffered severe economic losses as state and federal regulations reduced nationwide demand for the resource. This caused tremendous hardships in communities and towns across The Mountain State that helped to fund schools and emergency services in communities. Fortunately during this time, the state’s natural gas industry maintained relatively steady production and even job growth. In 2017, increased output from the Marcellus and Utica shale formations helped boost West Virginia into becoming the seventh-largest natural gas producing state in the U.S.¹⁰

West Virginia’s abundant natural gas resources, in conjunction with its numerous underground natural gas storage fields,



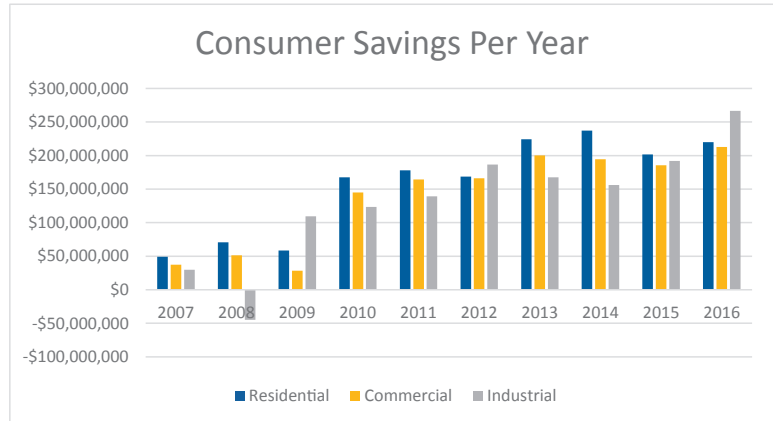
Source: U.S. Energy Information Administration



and proximity to pipeline and energy infrastructure have made the state a crucial energy supplier for the capacity constrained northeastern region - particularly during winter months when the energy source is needed for home heating.

West Virginia Energy Resources Power the State's Economy

In the last decade, natural gas has helped provide affordable energy to West Virginians. Expanded natural gas production across the state has allowed West Virginia consumers to save nearly \$4.3 billion between 2006 and 2016 due to increasing availability. Residential users alone saved almost \$1.6 billion, while commercial and industrial users saved over \$2.7 billion.¹¹



SOURCE: Energy Information Administration; calculations developed by Orion Strategies

More than just consumer savings, West Virginia's shale energy revolution is also creating thousands of family-sustaining jobs across the state. Since 2010, West Virginia's core shale-related industry employment increased 77.54 percent, employing nearly 12,000 West Virginians. In comparison, all industries in West Virginia only experienced a 15.74 percent change in employment during the same time frame.¹²

 **77.54% INCREASE**

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As a primary natural gas supplier for the region, a network of thousands of miles of pipelines crisscross the state. This pipeline infrastructure is critically essential to eliminating supply bottlenecks that could leave residents across The Mountain State and elsewhere in the northeast without access to affordable energy. In recent years, several pipeline projects and natural gas processing plants have entered the construction phase or have been completed to the benefit of the state's economy. The investment in pipeline infrastructure alone is estimated to be over \$16.7 billion, and the state's tax benefits from just two of these projects is nearly \$110 million.¹³ This amount of investment has allowed West Virginia's construction sector to see significant employment gains. Oil and gas pipeline construction jobs grew from almost 1,800 at the end of 2016 to 5,130 by the end of the third quarter in 2017 - a 185 percent increase.¹⁴

As new drilling technologies and techniques are implemented, the natural gas industry in West Virginia will be able to continue to affordably develop energy resources in an environmentally sustainable manner.



Antero Resources, for example, is investing \$275 million to develop water treatment and re-use facilities to aid its operations. Meanwhile, multiple private companies are looking to invest in new power plants across state. These and similar investments will continue to support the state's local economies via jobs and tax revenues.¹⁵ Since 2010, the severance tax alone on natural gas extraction has provided \$865.8 million to state and local governments.¹⁶

Looking Ahead

The future of West Virginia's energy resources and its critical pipeline network is under attack by out-of-state activists, some funded by foreign governments, who continue working to eliminate the production and transportation of safe, affordable sources of energy without offering any solutions to help meet consumer demand and environmental goals. With the savings that have occurred over the last decade, West Virginia's policymakers, regulators, and leaders must continue to come together in support of local energy production and infrastructure that will continue to help our state thrive and ensure that hard-working families, seniors, households, and small businesses can continue to enjoy the benefits that low prices are bringing to our communities.

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1. https://wvtourism.com/wp-content/uploads/2018/02/GoToWV_AnnualReport_2017_011918.pdf
2. <https://www.eia.gov/consumption/residential/reports/2015/energybills/>
3. <https://talkpoverty.org/state-year-report/west-virginia-2017-report/>
4. https://www.eia.gov/state/seds/sep_sum/html/pdf/rank_pr.pdf
5. Based upon 2018 HHS Poverty Guidelines. <https://aspe.hhs.gov/poverty-guidelines>
6. <https://www.bankrate.com/banking/savings/financial-security-0118/>
7. <https://www.cnbc.com/2018/01/18/few-americans-have-enough-savings-to-cover-a-1000-emergency.html>
8. <https://www.eia.gov/state/analysis.php?sid=WV>
9. <http://busecon.wvu.edu/bber/pdfs/BBER-2017-05.pdf>
10. <https://www.eia.gov/state/analysis.php?sid=WV>
11. Calculations developed by Orion Strategies. \$1.32 billion saved by industrial users, \$1.57 billion saved by residential users, and \$1.385 billion saved by commercial users. This number was calculated by using the annual average price per thousand cubic feet of natural gas for residential, commercial, and industrial consumers. This EIA price was then applied to the total MMcfs consumed in West Virginia, also sourced by EIA. The Consumer Price Index utilized by the Bureau of Labor and Statistics was applied to each year's price in order to adjust each price to 2016 dollars. 2016 was used as a cutoff date as it was the last year for which residential and industrial data were released.
12. Utilizing the Quarterly Census of Employment and Wages, CEA Calculated Core Shale-Related Industries and Ancillary Shale-Related Industries between Q1 2010 and Q1 2017.
13. <https://atlanticcoastpipeline.com/about/tax-revenue.aspx> and <https://www.mountainvalleypipeline.info/local-summaries>
14. http://www.wvpolicy.org/rising_natural_gas_prices_responsible_for_construction_job_growth
15. https://www.wvnews.com/progress/state_of_ncwv/here-comes-the-boom-part-west-virginia-s-oil-and/article_cb33d265-4776-501f-b85a-9e6e29c16643.html
16. <https://tax.wv.gov/ResearchAndGovernment/Research/SeveranceTaxHistoryAndData/Pages/SeveranceTaxHistoryAndData.aspx> for FY 2010 - 2017