



Everyday Energy for Pennsylvania

Due to increased production and new technologies, Pennsylvania natural gas consumers have saved over \$30.5 billion between 2006 and 2016 simply as a result of the decreasing price of natural gas. These savings often go unnoticed as we move through our daily lives - becoming almost oblivious to price fluctuations unless they are so stark they induce panic.

When most people consider the role of energy in their daily lives, they think about basic things like air conditioners and furnaces, gas stations, and lighting their homes. However, if you take a closer look, you can see the true impact of energy in our everyday lives. Energy has enabled technology across the spectrum to accelerate at a rapid pace, whether that is through the development of new, light-weight materials or providing ways to transform that technology to make it smaller or more durable. Energy also ensures that medical equipment can keep pace with research and advancements in the healthcare industry. Without energy, electric vehicles wouldn't exist, grocery stores wouldn't be able to stock their shelves, and cars wouldn't have the same mechanisms that keep us safe. The modern conveniences of our everyday lives would not exist or they would be inaccessible.

It is easy to take many of these benefits for granted. Whether you're from a small family farm sprinkled across rural Western Pennsylvania or part of the sprawling urban industrial areas of Philadelphia and Pittsburgh, it is important to remember that each of us has a stake in making sure we meet our energy needs. And having affordable, reliable energy on demand is essential to keeping our busy lives and industries moving.

Consumer Energy Alliance (CEA) strongly supports the continued development of natural gas and other traditional and alternative energy sources. We hope that all of Pennsylvania's elected leaders embrace the benefits and growth potential that all energy production, especially natural gas, brings to families, farms, and factories throughout our state.

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And while energy seems plentiful, unfortunately, for many households and families in the United States, energy insecurity is an everyday reality. 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% reported receiving a disconnection notice for their energy service. Households may have also used less energy than they would prefer to: 11% of households surveyed reported keeping their home at an unhealthy or unsafe temperature.”¹

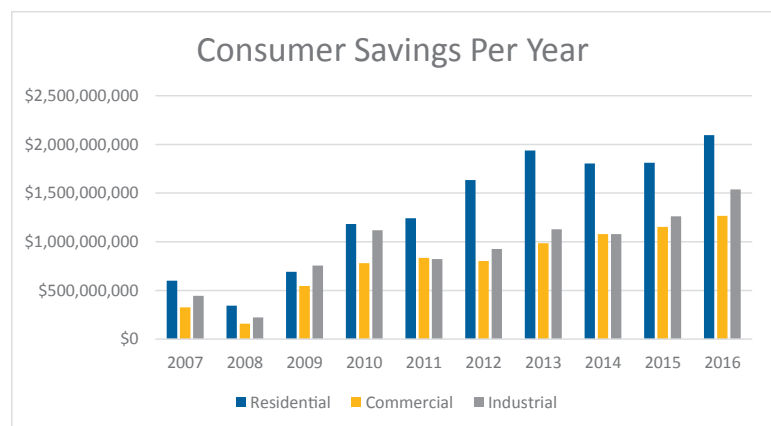
So How Does That Translate To Pennsylvania?

Nearly 1.6 million Pennsylvanians, or 12.9 percent of the population, live in poverty.² This statistic doesn't include those who live paycheck to paycheck with little or no savings. On average, Pennsylvanians spent \$3,108 for their energy needs in 2016.³ For those living at or below the poverty line, this translates to at least 25.6 percent of their income going toward energy expenses.⁴

High energy prices can impact all Americans – even across multiple income levels. A January 2018 survey by Bankrate found only 39 percent of Americans had \$1,000 saved to cover a financial emergency.⁵ CNBC recently reported that “69 percent of Americans had less than \$1,000 in total savings and 34 percent had no savings at all.”⁶

Affordable Energy for Pennsylvania

Pennsylvania is a leading producer of natural gas in the U.S. and worldwide. Nationwide, Pennsylvania ranks second – behind Texas – in estimated proved natural gas reserves, with nearly three-fifths of the state sitting on top the Marcellus natural gas field. And while the state has a large diversity of fuel sources, half of all Pennsylvanians rely on natural gas as their primary heating fuel and a growing number of electric generation facilities are utilizing natural gas to power the state. In fact, electricity accounts for nearly half of the natural gas consumed in Pennsylvania.⁷



Source: Energy Information Administration



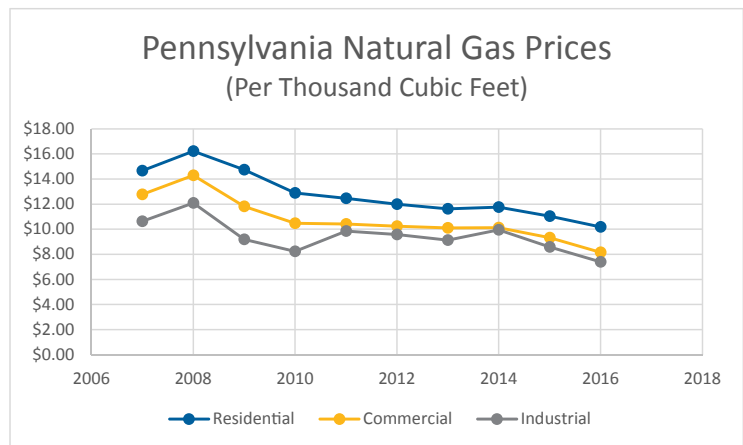
In 2008, at the beginning of the shale revolution, prices for natural gas in Pennsylvania peaked at \$10.39 per thousand cubic feet and steadily decreased to just \$3.72 by 2016.⁸ Due to increased production and new technologies, Pennsylvania natural gas consumers have saved over \$30.5 billion between 2006 and 2016 simply as a result of the decreasing price of natural gas - with residential users saving over \$13.3 billion, while commercial and industrial users saved over \$17.2 billion.⁹



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The Role Energy Plays in Revitalizing Pennsylvania

Pennsylvania's abundant energy resources have spurred economic investment and brought jobs to the state. A PricewaterhouseCoopers report tallied nearly 322,600 jobs in Pennsylvania that provide nearly \$23 billion in wages to Pennsylvanians.¹⁰ In 2017, the median annual salary for an employee at one of Pennsylvania's top oil and natural gas producers exceeded \$113,000.¹¹ These wages support local economies and grow small businesses. In fact, the report attributed almost \$44.5 billion in economic impact from the state's oil and gas industry.¹²



Source: Energy Information Administration

Pennsylvania's energy industry creates jobs in a number of fields including construction, manufacturing, and logistics. In 2017, high production rates in the Marcellus region generated high demand for pipeline transport of natural gas supplies. Because of this increase, Pennsylvania saw the oil and gas pipeline industry grow 153.5 percent - creating jobs for over 21,000 workers.¹³

Additional economic growth is also on the horizon in Pennsylvania. New gas storage facilities as well as industrial plants that convert natural gas to substances that produce various types of plastics are planned for the state. In 2016, Royal Dutch Shell announced its plans to develop a \$6 billion ethane "cracker" in Beaver. This single investment alone promises 6,000 jobs for construction workers and another 600 permanent positions.¹⁴ The company also has plans to build another 250-megawatt natural gas-fired



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power plant that would provide electricity and steam to run the cracker plant. Even more, approximately one-third of the electricity generated by the facility will be used to supply the local electrical grid.

The Future of Pennsylvania Energy

Despite the tremendous benefits and critical importance of energy production to Pennsylvanians, the future of Pennsylvania's energy is threatened by out-of-state activists, some funded by foreign governments, who continue working to eliminate the production of safe, affordable sources of energy without offering any solutions that will help meet consumer demand while also supporting our emissions goals. One thing is for sure, natural gas plays a critical role in powering the Keystone State's homes, businesses and economy. Pennsylvania's policymakers, regulators, and leaders must continue to come together in support of the state's homegrown energy production to ensure that our state continues to thrive and 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://www.eia.gov/consumption/residential/reports/2015/energybills/>

2 <https://talkpoverty.org/state-year-report/pennsylvania-2017-report/>

3 https://www.eia.gov/state/seds/sep_sum/html/pdf/rank_pr.pdf

4 Based upon 2018 HHS Poverty Guidelines. <https://aspe.hhs.gov/poverty-guidelines>

5 <https://www.bankrate.com/banking/savings/financial-security-0118/>

6 <https://www.cNBC.com/2018/01/18/few-americans-have-enough-savings-to-cover-a-1000-emergency.html>

7 <https://www.eia.gov/state/analysis.php?sid=PA>

8 <https://www.eia.gov/dnav/ng/hist/n3050pa3A.htm>

9 Calculations developed by Orion Strategies. \$9.2 billion saved by industrial users, \$13.3 billion saved by residential users, and \$7.9 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 Pennsylvania, 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.

10 https://www.api.org/~media/Files/Policy/Jobs/Economics-Nat-Gas-Oil/API_OilEconomy_Pennsylvania.pdf

11 <http://www.post-gazette.com/powersource/companies/2018/05/14/Pittsburgh-good-paying-energy-jobs/stories/201805130044>

12 https://www.api.org/~media/Files/Policy/Jobs/Economics-Nat-Gas-Oil/API_OilEconomy_Pennsylvania.pdf

13 <https://www.workstats.dli.pa.gov/Documents/PAQW/PAQW.pdf>

14 <https://www.cNBC.com/2018/04/23/appalachia-markets-itself-as-global-energy-hub.html>