

A Steady Stream of Natural Gas Provides Affordable Energy to New Jersey Residents and Helps the Garden State Grow

Affordable Energy for all New Jersey Residents

Across the nation, more and more families are living paycheck-to-paycheck – with little to no savings. Only 39 percent of Americans had \$1,000 saved to cover a financial emergency, according to a January 2018 survey by Bankrate.¹ CNBC recently reported that "69 percent of Americans had less than \$1,000 in total savings and 34 percent had no savings at all."²

On average, each resident of New Jersey spent \$3,124 to meet their energy needs in 2016, which is more than neighboring New York, Pennsylvania, and Maryland.

As a result, more and more, American families are struggling 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 also found that roughly one in three

households reported reducing or forgoing basic necessities like food and medicine to pay an energy bill. A further 14 percent reported receiving a disconnection notice for their energy service. Households also used less energy than they would prefer to with 11 percent of households that were surveyed reporting they keep their home at an unhealthy or unsafe temperature.³

Like many states across the nation, New Jersey faces challenges due to its high cost of living and, unfortunately, many New Jersey families also face energy insecurity.

On average, each resident of New Jersey spent \$3,124 to meet their energy needs in 2016,⁴ which is more than neighboring New York, Pennsylvania, and Maryland. In the same year, New Jersey also ranked 11th nationwide for energy expenditures, which totaled more than \$28 billion.⁵

As the ninth-most tax burdened state in the nation, these high energy costs can have a significant impact on New Jersey residents and businesses.⁶ New Jersey holds the



\$21.2 BILLION

Natural gas and oil production in New Jersey helped save families and businesses almost \$21.2 billion.



unenviable position of having more residents leave than any other state in the nation. New Jersey residents, especially those on fixed incomes and below the poverty line, have little room in their budgets for increased energy bills.

Ten percent of the state's population lives at or below the poverty line.⁷ That's nearly 900,000 New Jersey residents who live in poverty - enough people to fill Met Life Stadium almost 11 times.⁸

With many pipelines and power plant projects on hold or stalled in the government review process, it is little surprise that residents from Cape May to Jersey City paid 15 percent more for natural gas in 2018. And today, New Jersey customers pay a residential electric rate that is 28 percent higher than the national average.^{9 10} The current constraints on the natural gas market in New Jersey, which can be alleviated with additional infrastructure investment, resulting in higher costs to consumers which are entirely avoidable.

Now, Governor Murphy's proposed Energy Master Plan (EMP) and energy policies could pose additional challenges for residents' pocketbooks. The governor's goal - 100 percent clean energy by 2050 – is ambitious and expensive for residents and businesses. Renewable energy production is more expensive than conventional sources and requires added investment in storage and transmission. Based on national estimates, it would cost \$5.7 trillion to convert U.S. electric generation to all renewables; New Jersey's pro rata share of that cost would be nearly \$115 billion. ¹¹ That works out to about \$12,900 per person, based on the U.S. Census Bureau's New Jersey population estimate of 8.9 million people in July 2018.

In addition, the New Jersey Board of Public Utilities is also considering limits on consumer choice that could increase energy demand and people's bills. It recently proposed eliminating financial incentives to help residents and small businesses convert from oil or propane to high-efficiency natural gas heating systems. These incentives have saved New Jersey's families millions of dollars in energy costs and helped lower greenhouse gas emissions.

If the Governor adopts this proposal and removes financial incentives from natural gas home heating options, the alternative electric heat systems will cost customers an additional \$3,000 for installation and nearly \$500 per year in operating costs.^{12 13} The added costs achieve no environmental benefits.

Fortunately, having a diversified energy mix that includes natural gas and renewable



Source: Energy Information Administration; calculations developed by Orion Strategies



energy can help drive down costs and customer bills, including for the most disadvantaged among us, and still achieve the state's clean energy goals.

Energizing New Jersey's Economy

Not only do affordable energy sources like natural gas heat New Jersey homes in the winter and keep the lights on, but they are also essential to moving goods to markets and supporting the development of cuttingedge technologies.

With diverse industries such as biotechnology, manufacturing, logistics, and financial services, New Jersey has a rich and varied economy that depends on access to affordable, reliable energy.



In 2017, the Port of New York and New Jersey, ranked third in the U.S., handled over 3.8 million cargo containers valued at almost \$200 billion. Meanwhile, the state's 39,000 miles of roadways carried goods to businesses and moved residents to and from work each day,¹⁴ some of whom perform crucial scientific research along with the development and manufacturing of life-saving drugs and medical equipment, which has generated over 112,000 high-paying jobs for the state.¹⁵ One thing these industries share? Their business could not go on as usual without affordable, reliable domestic natural gas resources.

We need to protect our access to natural gas to preserve our state's economic well-being. Therefore, it is essential that New Jersey's energy consumers work with their local and state governments to guarantee that families and businesses can continue to count on domestic energy, and the natural gas networks that deliver these vital energy resources to our homes and businesses.

Unlike nearby states, New Jersey does not produce any of its recoverable sources of natural gas.¹⁶ This is

especially important to note as natural gas, along with nuclear, make up 90 percent of New Jersey's net electricity generation.¹⁷ Natural gas is essential to help keep the state moving.

Currently, 75 percent of households count on natural gas for warmth. For this reason, New Jersey is heavily dependent on energy infrastructure to transport the needed supplies via interstate pipelines. Unfortunately, there might not be enough supply very shortly. Any supply disruption,



Source: U.S. Energy Information Administration



additional capacity demands, shutdowns, or changes in weather could not only increase prices but leave hundreds of thousands of New Jersey residents without power. This means it will be absolutely vital for the state to consider additional infrastructure projects which ensure residents of New Jersey not only have access to affordable supplies of energy but reliable supplies as well.

According to a PricewaterhouseCoopers study, in 2015 the oil and natural gas industry contributed 142,200 jobs and accounted for more than \$10 billion in wages for the State of New Jersey.

Michael Renna, President and Chief Executive Officer of South Jersey Gas Company (SJG) and Elizabethtown Gas Company (ETG) noted similar issues in his comments to the New Jersey Board of Public Utilities (BPU,) regarding the EMP. Renna said that the lack of pipeline capacity has hindered residents and businesses alike from accessing the benefits of cheap natural gas from nearby Pennsylvania due to capacity constraints caused by inadequate infrastructure, which in turn impeded his companies' ability to provide consumers with cost-effective energy.

These sentiments were also echoed by Greg Lalevee, business manager of the International Union of Operating Engineers Local 825 who said in a recent article, "If we don't invest in expanding natural-gas energy to promote a stable, affordable mix of energy sources, New Jersey could face the same supply crisis New York is currently dealing with. We must learn from this example and do better. If not, the cost of energy will soar and residents, from urban to suburban, will pay the price – leaving those with less means hit the hardest. We need affordable and available energy now to continue operating our daily lives as we research and develop the next-generation solution."¹⁸

Since 2010, the state's electricity generation has increased its reliance on natural gas by more than 30 percent.¹⁹ Due to this increase, more pipelines have been planned or are currently under construction to safely transport cleaner-burning natural gas supplies to meet New Jersey's growing energy needs.

Consumers, families, and small businesses count on the reliable energy they receive through pipelines to help power their lives and keep a lid on price spikes on high-demand days.

Thanks to increased natural gas production across the U.S. -- New Jersey's families and businesses saved more than \$21.2 billion between 2006 and 2016. Residential users saved more than \$11.5 billion, while commercial and industrial users saved almost \$9.7 billion combined.²⁰

According to a PricewaterhouseCoopers study, in 2015, the oil and natural gas industry employed 142,200 residents and accounted for more than \$10 billion in wages for the State of New Jersey. These jobs represent truck drivers, engineers, contractors and office workers who make natural gas production and delivery possible. Their wages invigorate New Jersey's economy through real estate, vehicle purchases, and support for small businesses. In total, oil and natural gas provide nearly \$21 billion to New Jersey's state economy annually,



including employee compensation, proprietors' income, income to capital owners from property and indirect business taxes.²¹

The \$1.4 billion in savings natural gas has provided the industrial sector is especially important, as New Jersey is home to some of the most significant manufacturing organizations in the world. These businesses represent an essential part of New Jersey's growing economy -- and natural gas plays a significant role in their business. That's because natural gas is a vital feedstock to many manufacturing processes, including drying, melting, machine drive, and space heating. In 2016 alone, manufacturing contributed almost \$34.3 billion to the state's economy and employed more than 161,000 workers in the region.²²

New Jersey's Energy Future

Currently, New Jersey's access to affordable energy via the state's pipeline network and potential access to valuable onshore energy supplies is under attack by anti-pipeline development activists. Those efforts, coupled with Governor Murphy's proposed policies and revisions to the state's Energy Master Plan, prevent New Jersey's people from accessing reliable, affordable American energy resources.

Supporting the Governor's renewable energy goals along with affordable, reliable, and clean natural gas can protect New Jersey's customers from high prices and energy insecurity. The fact remains, New Jersey is clean and getting cleaner. There is a need for both renewable energy and natural gas in New Jersey's clean energy future.

Rigorous environmental standards and energy production can and do coexist. From 2000 to 2017, nationwide emissions of key pollutants have decreased across the board:

- 52 percent decrease in nitrogen oxides (NO_x)
- 83 percent decrease in sulfur dioxide (SO₂)
- 19 percent decrease in volatile organic compounds (VOCs)
- 37 percent reduction in fine particulate matter (PM_{2 5})²³

Additionally, since 2005, the U.S. power sector has reduced carbon dioxide (CO2) emissions by 28 percent.²⁴ In December 2017, the natural gas industry announced The Environmental Partnership to reduce emissions of methane and volatile organic compounds further.²⁵ These improvements are occurring at a time when our country has catapulted forward to become the world's leading producer of natural gas. The natural gas industry is also focused on advancing the production of renewable natural gas through the use of existing waste streams including landfills, wastewater, and food waste, which can all be further processed to create low- to no-carbon natural gas, further enhancing its environmental profile.

Consumer Energy Alliance (CEA) works in New Jersey and across the country to support and advocate for the continued development of sound energy and environmental policies that allow for sustainable use of natural



gas along with other traditional and alternative energy sources. CEA also recognizes the vital role transportation infrastructure like pipelines and transmission lines serve in delivering critical energy throughout New Jersey.

With the savings that have occurred in recent years, New Jersey's policymakers, regulators and leaders must come together in support of access to energy resources and infrastructure development. This will not only help the state continue to thrive but ensure that hard-working families, seniors, households and small businesses can continue to enjoy the benefits that low prices are bringing to their lives and their communities.

- ¹ <u>https://www.bankrate.com/banking/savings/financial-security-0118/</u>
- ² <u>https://www.cnbc.com/2018/01/18/few-americans-have-enough-savings-to-cover-a-1000-emergency.html</u>
- ³ <u>https://www.eia.gov/consumption/residential/reports/2015/energybills/</u>
- ⁴ <u>https://www.eia.gov/state/seds/sep_sum/html/pdf/rank_pr.pdf</u>
- ⁵ Ibid.
- ⁶ https://www.cnbc.com/2018/04/10/us-states-with-the-highest-tax-burdens.html
- ⁷ <u>https://talkpoverty.org/state-year-report/new-jersey-2018-report/</u>
- ⁸ <u>https://www.metlifestadium.com/stadium/seating-maps</u>
- ⁹ https://www.bls.gov/regions/new-york-new-jersey/news-release/averageenergyprices_newyorkarea.htm
- ¹⁰ <u>https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a</u>
- ¹¹ <u>https://www.americanactionforum.org/research/what-it-costs-go-100-percent-renewable/#_ednref1</u>
- ¹² America's electricity generating capacity is 1,085 gigawatts. Nationwide investment cost to convert to 100 electricity generation to renewable energy sources is at least \$5.7 trillion. New Jersey accounts for two percent of total U.S. electric power generation, or approximately \$114 billion of the estimated investment cost.
- ¹³ Dispatching Direct Use: Achieving Greenhouse Gas Reductions with Natural Gas in Homes and Businesses, American Gas Association, Table A-1. https://www.aga.org/research/reports/dispatching-direct-use-achieving-greenhouse-gas-reductions-with-natural-gas-in-homes-and-businesses/
- ¹⁴ <u>https://www.eia.gov/outlooks/aeo/assumptions/pdf/residential.pdf</u>
- ¹⁵ https://www.nj.gov/labor/lpa/pub/empecon/tld.pdf
- ¹⁶ https://www.nj.gov/labor/lpa/pub/empecon/biopharma.pdf
- ¹⁷ https://pubs.usgs.gov/fs/2012/3075/fs2012-3075.pdf
- ¹⁸ <u>https://www.eia.gov/state/?sid=NJ</u>
- ¹⁹ https://www.njspotlight.com/stories/19/04/04/op-ed-strong-supply-of-natural-gas-and-low-prices-are-essential-in-nj/?fbclid=lwAR0fshAswu2WLEGNyVptj LOH-bT0WDzr0hi6wDeNFl3b-zMGjybdDYQY9Sk
- 20 Ibid.
- ²¹ Calculations developed by Orion Strategies. \$1.39 billion saved by industrial users, \$11.5 billion saved by residential users, and \$8.3 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 MMcf consumed in New Jersey, also sourced by EIA. The Consumer Price Index (CPI) 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 2017 CPI data was not available at the time of publication.
- ²² https://www.api.org/~/media/Files/Policy/Jobs/Economics-Nat-Gas-Oil/API_OilEconomy_New_Jersey.pdf
- ²³ <u>https://www.nj.gov/labor/lpa/pub/empecon/advmfg.pdf</u>
- ²⁴ <u>https://www.epa.gov/air-trends/air-quality-national-summary#emissions-trends</u>
- ²⁵ <u>https://www.eia.gov/todayinenergy/detail.php?id=37392</u>
- ²⁶ <u>https://theenvironmentalpartnership.org/</u>