Powering the Way for a More Vibrant Illinois

Energy from clean, abundant and affordable natural gas saved Illinois families and businesses more than $24 billion between 2007 and 2017.[i]

Illinois benefits from a vibrant economy that supports a diverse range of industries including financial services, biotechnology, manufacturing, agriculture and information technology. With such diversity and a robust economy, it is little surprise that the state's gross domestic product, at $900 billion for 2017, is 21% of the Midwest's regional GDP, which includes the Great Lakes and Plains.[ii] All of these sectors are dependent on affordable and reliable energy from natural gas. Natural gas powers the state's industrial facilities, enables life-saving research, and moves goods everywhere from Carbondale to the Chicagoland area.

Access to affordable and reliable energy resources supports many functions throughout Illinois' day-to-day operations. It must not be taken for granted, and Illinoisans should work with their local and state officials to guarantee that families and businesses are able to count on stable, domestic energy supplies and the pipeline networks that deliver it to their homes and businesses.

$24 BILLION

The amount Illinois consumers saved between 2007 and 2017 because of natural gas.

The Importance of Affordable Energy

On average, each Illinois resident spent $3,168 for their total energy needs in 2017.[iii] For those living at or below the poverty line, this translates to a quarter of their income going toward energy expenses.[iv] Unfortunately, more than 12% of Illinois' population lives in poverty.[v] That is almost 1.6 million men, women and children – enough people to fill up Soldier Field 26 times.[vi]

With statistics like these, it should come as no surprise that 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% reported receiving a disconnection notice for their

$13.8 BILLION

Combined, commercial and industrial users saved more than $13.8 billion because of natural gas.

energy service. Households also used less energy than they would prefer to – 11% of households surveyed reported keeping their home at an unhealthy or unsafe temperature."[vii]

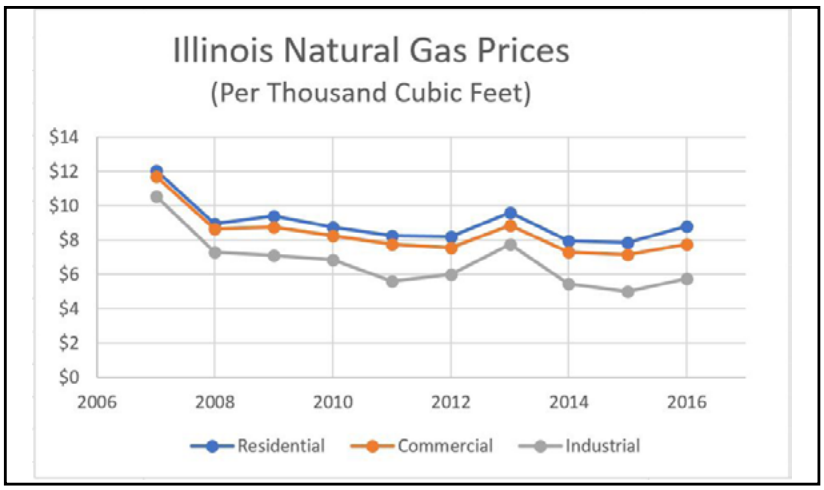
Evidence indicates that many families have limited savings to address a financial emergency.[viii] CNBC recently reported that "69% of Americans had less than $1,000 in total savings and 34% had no savings at all."[ix]

Policies that allow for expanded production of affordable and reliable natural gas are an important solution that can help to alleviate the economic stress of so many Illinoisans and provide opportunity for our neighbors across the state. Without affordable natural gas, energy costs for Illinois consumers will rise and place an increased burden on the state's families and businesses. Illinoisans spent only 16%, or $528, of their 2017 total energy expenditures on natural gas energy.[x]

Recent proposals by activist groups to force the replacement of natural gas with other energy sources will be costly to American families. An average American household could expect to pay several thousand dollars to replace gas-powered appliances such as furnaces, water heaters, clothes dryers and cooking ranges in addition to the installation of new electrical wiring and equipment like heat pumps to meet their energy needs. For a typical household in the Chicagoland area, these costs could top out at over $9,000 - which would put a crushing burden on working families, seniors and those on fixed incomes.[xi]

Natural Gas and its Impact on Midwest and Illinois Farmers

American farmers rely on natural gas to power their agricultural operations. Not only is natural gas essential to power equipment such as crop dryers, but it is also an important component in the manufacturing of fertilizers and pesticides. The state's 75,000 farmers rely on affordable natural gas to continue to grow and harvest products to send to families throughout the Midwest and the rest of country. Illinois is a leading producer of soy beans, corn and pork with nearly 75% of the state's land area devoted to agriculture.



Source: U.S. Energy Information Administration

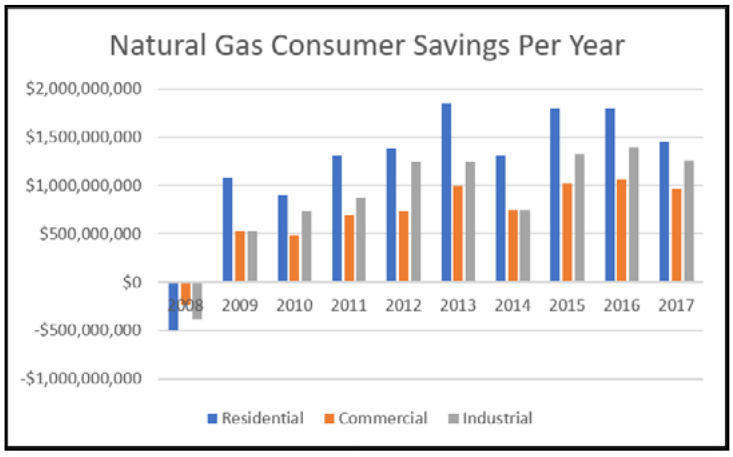
According to the Illinois Department of Agriculture, the Land of Lincoln's farm families and operations provided $19 billion to the state's economy just in commodity value, which can be used for Illinois' strong manufacturing base. It ranks first in the nation in processed food sales at $180 billion per year.[xii] None of this would be possible without power for irrigation, natural gas for fertilizing and drying cops, and fuel for getting products to market. Natural gas is also a less expensive alternative to propane for crop drying. In 2018, Illinoisans on average paid $1.72/gallon for propane and the average price for natural gas was $8.16 per thousand cubic feet (Mcf). Converting these figures on an energy equivalency basis would show that a typical natural gas customer would pay $7.86/MMBtu compared to $18.83/MMBtu for a propane customer according to the U.S. Energy Information Administration.[xiii]

$11 BILLION

Illinois residential consumers alone saved almost $11 billion between 2007 and 2017.

There are limited alternative options outside of natural gas for farm operations to dry crops and to heat rural homes outside of propane, which historically has seen varying price fluctuations and is dependent on a limited pipeline distribution system. For example, there were late harvests due to wet fields in the Midwest that exacerbated distribution issues at key times for operations in both 2014 and 2019. During 2014, an exceptionally cold winter caused the closure of a key pipeline while propane demand for crop drying surged across the Midwest, triggering significant price spikes and supply disruptions.[xiv] In 2019, a propane supply issue during the fall harvest struck farm operations across the region.[xv] If readily available, the abundant supply of US national gas could safely and cheaply supply Illinois families and farmers with their energy needs long into the future.

Energizing the Midwest and Powering Illinois' Economy



Source: Energy Information Administration; calculations developed by Orion Strategies

Illinois has few producing natural gas wells, but it is the nation's 10th largest natural gas consumer. Natural gas is Illinoisans' clear choice for household heating with 80% of the state's households using it to warm their homes during the winter. This is because efficient natural gas furnaces are ideal for the harsh winters many Illinois families and households face.

Illinois is also strategically positioned at a significant natural gas crossroads for the

United States with several interstate pipelines bringing supplies from the south and west converging at two major natural gas market centers within the state. Two-thirds of the natural gas supplies that enter Illinois are transported to consumers in eastern and northern states.[xvii]

Nationwide, advances in horizontal drilling and hydraulic fracturing have increased production of natural gas across the country and enabled Illinois consumers to save more than $24 billion between 2007 and 2017. Residential users alone saved almost $11 billion. Based upon current population estimates, this equals $876 per citizen. Commercial and industrial natural gas users saved $13.8 billion combined.[i]

A recent analysis by the Citizens Utility Board of Illinois found that consumers and families continue to save money from lower natural gas prices, which were down across every utility in November 2019 from the previous year. [xviii]

The National Association of State Energy Officials and the Energy Futures Initiative report that Illinois' 2019 energy industry employed 4,655 workers in gas electric power generation and an additional 1,416 in natural gas extraction and field machinery manufacturing.[xix] Furthermore, statewide natural gas distributors reported the following Illinois employment data:

- Ameren Illinois
    - o 3,400 employees[xx]
- Peoples' Gas
    - o Approximately 1,500 employees
- Nicor Gas
    - o More than 2,000 employees[xxi]

6,900+

The number of people employed by natural gas distributors in Illinois.[xxii]

These figures do not include the thousands of members of the building trades and organized labor who help construct and maintain pipeline infrastructure. An analysis conducted by Industrial Info Research LLC, found that the Great Lakes region (which includes Illinois) accounted for 19% of the pipeline construction jobs created from 2006-2015, roughly 7,900 full-time equivalent (FTE) jobs annually.[xxiii]

According to a 2016 report by RCF Economic & Financial Consulting, Inc., Illinois' oil and gas industry paid $330 million in state taxes. An additional $106 million in state sales and income tax revenues came from oil and gas employees.[xxiv] Another study by the Illinois Petroleum Resources Board reported property taxes assessed on oil and gas reserves in the state generated almost $89.2 million from 2007 to 2017. During that time frame, $44.5 million was generated for schools in counties with oil and gas production.[xxv]

The Future of Illinois Energy

The future of Illinois' energy and pipeline network and the savings we have enjoyed could be put at risk by poor policies eliminating the production and transportation of safe, affordable sources of energy without offering any viable and affordable solutions for Illinois' families, small businesses and communities. Many are unaware of the critical importance that natural gas plays in supporting the deployment and use of Illinois vibrant renewable resources due to their intermittent nature and inability to provide a quick back-up resource. Rigorous environmental standards and energy production can and do co-exist. For example, U.S. energy-related CO_2 emissions have declined during seven of the past 10 years, and are now 14% lower than in 2005.[xxvi] These improvements are occurring at a time when our country has catapulted forward to become the world's leading producer of oil and natural gas.[xxvii]

Consumer Energy Alliance (CEA) works to support and advocate for the continued development of natural gas and other traditional and alternative energy sources as well as infrastructure such as pipelines and transmission lines that move energy throughout Illinois. It is important for our state's elected officials to embrace the benefits and growth potential that energy production and natural gas brings to families, schools, farmers and factories across the state.

[i] Calculations developed by Orion Strategies. $7.75 billion saved by industrial users, $10.95 billion saved by residential users, and $6.07 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 Illinois, 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. 2017 was used as a cutoff date as 2018 CPI data was not available at the time of publication.

[ii] https://apps.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=2#reqid=70&step=1&isuri=1&acrdn=2

[iii] Total Energy Price and Expenditure Estimates, Ranked by State, 2017. Total expenditure includes coal, natural gas, distillate fuel oil, HGL, jet fuel, motor gasoline, residential fuel oil, nuclear fuel, biomass, electric power sector and electricity retail prices. https://www.eia.gov/state/seds/sep_sum/html/pdf/sum_pr_tot.pdf

[iv] Based upon 2019 HHS Poverty Guidelines. https://aspe.hhs.gov/poverty-guidelines

[v] https://talkpoverty.org/state-year-report/illinois-2019-report/

[vi] https://www.isfauthority.com/facilities/history-of-soldier-field/

[vii] https://www.eia.gov/consumption/residential/

[viii] https://www.bankrate.com/banking/savings/financial-security-0118/

[ix] https://www.cnbc.com/2019/01/23/most-americans-dont-have-the-savings-to-cover-a-1000-emergency.html

[x] Primary Energy, Electricity, and Total Energy Expenditure Estimates, 2017. https://www.eia.gov/state/seds/sep_sum/html/sum_ex_tot.html

[xi] The calculations were based on a scenario for a household in the Naperville, IL area using cost estimates from consumer home improvement sites such as HomeAdvisor, Homewyse, Fixr and Porch.com. The scenario examined the average cost to replace a gas dryer, stove, and water heater as well as install an electric heat pump, the need to upgrade electric panel wiring to 200 amps to handle the additional load. It further estimated the cost to replace and install new electric outlets and switches and the removal of old appliances. The entire estimated cost would be $9,184 and prices could vary depending on the type of appliance model selected, home size and geographic location in the state.

[xii] https://www2.illinois.gov/sites/agr/About/Pages/Facts-About-Illinois-Agriculture.aspx

[xiii] Illinois Price of Natural Gas to Residential Consumers. https://www.eia.gov/dnav/ng/hist/n3010il3a.htm; Weekly Illinois Propane Residential Price (calculated 2018 average price) https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=W_EPLLPA_PRS_SIL_DPG&f=W

[xiv] https://www.thedickinsonpress.com/business/agriculture/4811832-Propane-problems-make-a-long-harvest-even-longer

[xv] https://www.dtnpf.com/agriculture/web/ag/news/farm-life/article/2019/11/11/propane-demand-outstripping-pipeline

[xvi] https://kanecountyconnects.com/2019/11/state-declares-regional-emergency-in-response-to-propane-shortage/

[xvii] https://www.wifr.com/content/news/Illinois-declares-emergency-over-propane-shortage-564927962.html

[xviii] https://www.citizensutilityboard.org/blog/2019/11/05/november-illinois-natural-gas-prices-down-from-2018/

[xix] Energy Employment by State — 2019. https://static1.squarespace.com/static/5a98cf80ec4eb7c5cd928c61/t/5c7f375515fcc0964aa19491/1551841115357/USEER+Energy+Employment+by+State.pdf

[xx] https://www.ameren.com/-/media/illinois-site/files/media-resources/ameren-illinois-fact-sheet.ashx

[xxi] https://static1.squarespace.com/static/5a98cf80ec4eb7c5cd928c61/t/5c7f375515fcc0964aa19491/1551841115357/USEER+Energy+Employment+by+State.pdf

[xxii] Job estimates includes both gas and electric employees for Ameren Illinois and is meant to provide an approximate number of individuals supported by and a high-level overview and estimate of, the natural gas distribution industry.

[xxiii] https://www.api.org/~/media/Files/Policy/Jobs/8-11-17-Skilled-Trades-Employment-Pipeline-Study.pdf

[xxiv] https://www.rcfecon.com/download/the-oil-and-gas-industry-in-the-illinois-economy

[xxv] https://iprb.org/wp-content/uploads/2019/08/FINAL-Property-Tax-Report.pdf

[xxvi] https://www.eia.gov/todayinenergy/detail.php?id=36953

[xxvii] https://www.eia.gov/todayinenergy/detail.php?id=36292