

Natural Gas Usage and Market Development



NATURAL GAS USAGE AND MARKET DEVELOPMENT

Energy is one of the fundamental building blocks of an economy, anywhere in the world and at every stage of economic development. The availability and affordability of energy is an indispensable economic enabler and a major contributor to economic well-being.

Pennsylvania has emerged as a leader in natural gas production in the United States. Since the beginning of the shale-gas revolution a little over a decade ago, Pennsylvania now ranks second only to Texas in natural gas (dry) production. As of 2018, Pennsylvania was supplying 20% of the nation's demand from gas produced in the state, with production



expected to reach as high as 30% in 2020. The development of the Marcellus and Utica shales has allowed natural gas to become an important component of America's energy supply and economic health. The United States is once again at the global forefront of energy development. PIOGA is very focused on finding more ways to leverage these abundant natural resources for power generation, transportation, industrial (HHP) engines, manufacturing and even export.

PENNSYLVANIA, A NET EXPORTER

Today, Pennsylvania is no longer just a consuming region, as producers of oil and natural gas have been successful in recovering huge quantities of natural gas and natural gas liquids from "unconventional" formations such as the Marcellus and Utica. Pennsylvania will continue to be a consuming region of oil and natural gas and byproducts but is now also seen as an energy "supply region".

PIOGA's Market Development Committee is at the forefront of looking for opportunities to expand markets that utilize natural gas and natural gas liquids. PIOGA's market development committee advocates for the responsible production, development and use of PIOGA member resources.

BENEFITS TO CONSUMERS IN PENNSYLVANIA: RESIDENTIAL, COMMERCIAL AND INDUSTRIAL

Consumers in Pennsylvania use natural gas for heating, cooking, electric power, industrial use and more. The extraction of huge quantities of natural gas from shale formations in recent years has driven the price of gas down significantly in the state. The Pennsylvania Public Utility Commission estimates that the average Pennsylvania family is saving \$1,200 annually on their home heating bills due to

lower gas prices, which has also resulted in fewer utility shutoffs among needy families.



Natural gas has been safely used to heat homes and commercial buildings for decades, thanks to a robust system of pipelines, storage fields, compressors and processing facilities that deliver the fuel to end-users. Approximately 51% of homes in Pennsylvania rely on natural gas heat. Natural gas accounts for about 32% of energy consumed in commercial buildings.

DOMESTIC CHEMICAL AND MANUFACTURING GROWTH

Natural gas is driving regional and national growth in manufacturing, including chemicals, steel, pharmaceuticals, fertilizers and plastics. Manufacturing uses account for approximately 80% of total industrial demand for natural gas, either as a fuel or a feedstock for production.

Pennsylvania and the Appalachian Basin stand ready to benefit greatly from dramatic growth anticipated in chemical processing and production, starting with Royal Dutch Shell's investment of more than \$6 billion to construct an ethane cracker near Monaca, Beaver County. This facility is anticipated to spur the growth of a petrochemical manufacturing cluster to produce hundreds of consumer, medical and commercial goods derived from polyethylene.

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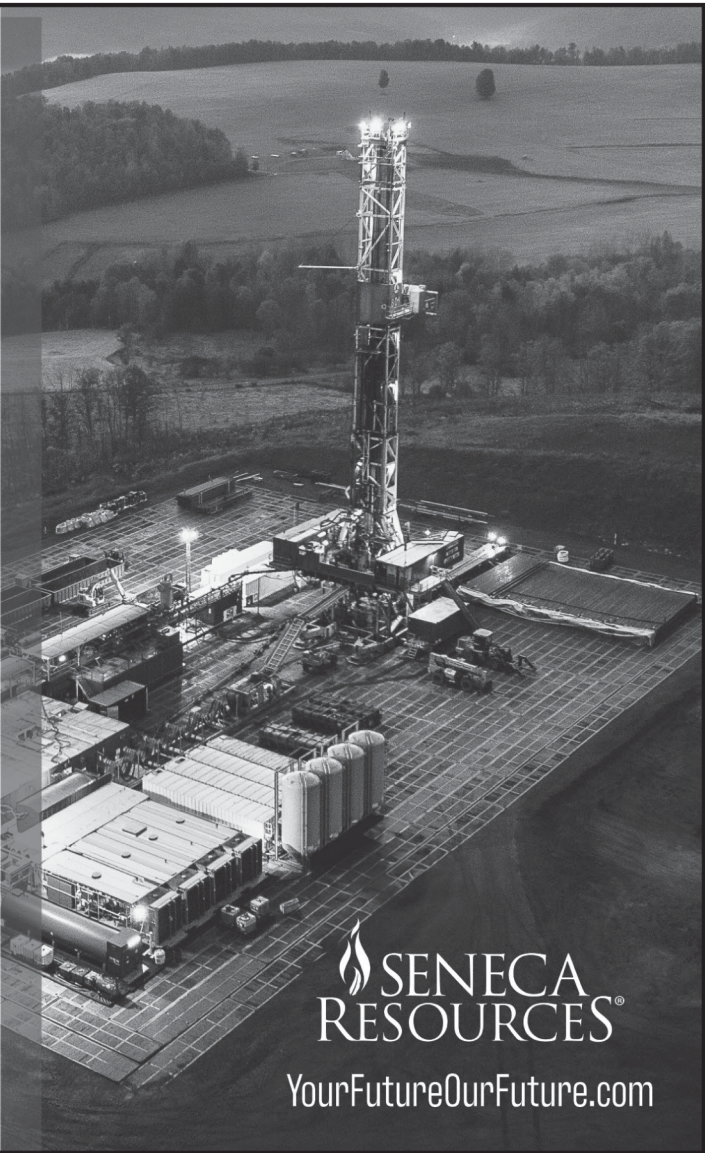
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Congressman GT

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