

Natural Gas from Pennsylvania: Affordable Energy, Clean Air, Economic Growth and Thousands of Vital Products

America's shale energy revolution has made the United States the largest oil and natural gas producer in the world, and Pennsylvania has emerged a leader in this growth. Pennsylvania's natural gas production more than doubled between 2013-2017 (3.259-6.210 trillion cubic feet or TCF), and now supplies more than 20 percent of the nation's demand for natural gas.

The benefits that come along with this staggering growth in production are equally impressive. Learn more below:

The average Pennsylvania family is saving \$1,200 annually in energy costs, thanks to the production of natural gas right here at home.

This chart tells part of the story, comparing the "Purchased Gas Cost" for eight major natural gas distribution companies between 2008-2019. The average price drop among those suppliers during that time is almost 64 percent.

Cost Savings to Families, 2008-2019			
Utility	PGC p 2008	er/MCF 2019	Percentage Decrease
PECO	\$11.10	\$3.53	-68%
NFG	\$10.34	\$3.10	-70%
PGW	\$10.56	\$4.17	-61%
Columbia	\$10.25	\$4.68	-54%
Equitable	\$11.81	\$4.22	-64%
UGI	\$11.79	\$4.85	-59%
UGI Penn	\$10.66	\$4.22	-60%
Peoples	\$9.53	\$2.59	-73%

Source: Pennsylvania Public Utility Commission

Pennsylvania's air is the cleanest it has been in decades due to the greater use of natural gas for electricity production.

This chart, showing statewide air monitoring results from the U.S. Environmental Protection Agency between 2000-2017, shows the steep drop in important air pollutants known as "National Ambient Air Quality Standards" that have been monitored by the states and USEPA since 1970.

Air Quality Improvements in Pennsylvania, 2000-2017			
NAAQS Pollutant	Percentage Decrease		
Carbon Monoxide	-63%		
Nitrogen Oxides	-58%		
Particulate Matter -10	-42%		
Particulate Matter -2.5	-37%		
Sulfur Dioxide	-88%		
Volatile Organic Compounds	-19%		

Source: USEPA Air Emissions Inventory

Estimated **339,000** Pennsylvania jobs

Oil and Gas Development and Processing: Economic Growth, Tax Payments and Essential Products.

It is estimated that more than 339,000 Pennsylvania jobs are connected to the state's energy development industry, and those workers typically make \$20,000/year more than the state's average wage earner.

In addition to the billions of dollars in state and local taxes paid by natural gas developers and service companies, more than \$1.7 billion has been allocated in Impact Fees that reach every county in the state, even those without drilling activity.

Royal Dutch Shell's \$6 billion ethane cracker facility in Beaver County, currently under construction and nearing completion, is the largest single investment in the Commonwealth since World War II. It is providing more than 6,000 jobs during construction and will support more than 600 permanent jobs once in operation. Approximately 70 percent of the nation's polyethylene customers are located within 700 miles of the Pittsburgh area, making it a strategic location to serve those markets as well as attract new companies that make the thousands of consumer, industrial, commercial and medical products derived from polyethylene.





Advanced medicine would not be possible without the use of thousands of plastic-based materials. Oil and natural gas are processed to make items ranging from a simple band-aid to life-saving products like pacemakers, insulin pumps, heart defibrillators and artificial joints. The number of items derived from oil and gas found in a typical emergency room, shown above, demonstrates the essential role petroleum products play in modern medicine and beyond. Everyone knows oil is refined into gasoline and natural gas is used to heat our homes and cook our food. Oil and natural gas are also essential to the production of an estimated 6,000 consumer products we use on a regular basis, with the number of products continuing to grow. It is estimated that the average U.S. citizen uses the equivalent of three gallons of refined petroleumbased products every day.

Stow, Ohio family - Photo courtesy of National Geographic and the Ohio Oil & Gas Energy Education Program

Items in a typical emergency room

Blood pressure cuff Blood pressure cuff tubing Chair Code cart/wheels EKG keads EKG wire covers End-Tidal carbon dioxide cable Fluorescent light covers Infectious waste container IV Pole wheels and hook IV pump V pump power cord Laminated charts Monitor/cables Nasal canula Ophthalmoscope Otoscope Ottoscope covers

Items found in an ER code cart

AED Alcohol swab packaging Ambu bag Atomizer Code cart lock tab CPR back board Endotracheal tubes Exam gloves Intubation blade IV catheters IV fluid bags IV tubing Lubrication Medication ampules Medication bottles Nasopharyngeal airways

Other medical devices used on a daily basis

Adhesive foam Bedpan Bleach wipe containers Crutch pads/grips Date stickers Hemovac drain IV caps Jackson Pratt drain Medical glue Nasogastric tubes Ostomy bags and appliance Patient call bell Patient room phone Overhead lamp/bulbs Oxygen saturation finger probe Oxygen wall to tubing adapter Patient education packets Plastic patient belonging bag Plastic slip cover for mattress Plastic-lined pillows Stethoscope label Stethoscope tubing Suction canister Suction tubing Thermometer Thermometer probe covers Trash bag Trash can Wall oxygen dial Wall suction dial Yankauer suction

Needle caps Non-rebreather mask Oral airways Oxygen tank dial Pacer pads Plastic cart housing Plastic cover over tip of scissors Plastic cover over tip of scissors Plastic tape Portable suction pump Saline flushes Sharps container Syringe caps Tourniquets Venti-mask

Patient socks/grip bottoms Peripheral venous catheter Plastic boxes of gauze Plastic medicine cups Plastic packaging on medications Pyxis machine Skin barrier packaging Sterile gowns Sterile packaging Sutures Three-way stopcocks Urinary catheters Walkers/canes