



EARTH DAY AT 50 YEARS: GREENER WITH NATURAL GAS

The roots of Earth Day, first planted in 1970 in communities and schools around the United States, have extended today to more than 192 countries around the world. Hundreds of millions of people have taken part and taken action over those 50 years to improve our global environment. American natural gas has become an essential part of the efforts to help clean our air and reduce greenhouse emissions, and Pennsylvania is at its forefront.



Clearing the Air in Pennsylvania

- Measurements of five important air emissions have decreased significantly in recent years, thanks to the use of more natural gas for electricity (Source: USEPA):

Percent Reduction, 2000-2017	
Carbon Monoxide	63%
Nitrogen Oxides	58%
Particulate Matter -10	42%
Particulate Matter -2.5	37%
Sulfur Dioxide	88%
Volatile Organic Compounds	19%

- Total greenhouse gas emissions from electricity production in Pennsylvania fell more than 33 percent between 2005-2016 (Source: PADEP), also due to increased natural gas use.
- Pennsylvania is the nation's largest exporter of electricity to other states, sending power throughout the Northeast. The state reduced the per-capita carbon emissions from its power plants by 40 percent between 2007-2017, thanks in large part to abundant natural gas as a fuel for electric generation.
- With natural gas use for electricity increasing by 10 percent between 2014-2018 and additional gas-fired generating sources being planned and built around the state, Pennsylvania is on track to continue a path toward cleaner air

Emissions Dropping Across the Nation

- The US Environmental Protection Agency's 2020 Greenhouse Gas Inventory reports that total methane emissions were 18 percent lower than 1990 levels and 10 percent below those recorded in 2005.
- Methane emissions related to the production of oil and natural gas between 1990-2018 declined by 23 percent, while the production of natural gas increased by 72 percent and the production of oil by 49 percent during the same period. (sources: USEPA, USEIA)
- In the electric power sector, carbon dioxide declined by 27 percent between 2005-2018, while natural-gas-fired electric generation increased by 93 percent. (sources: USEPA, USEIA)

Pennsylvania has quickly emerged as a national leader in the production of natural gas, a fuel that is clean-burning, abundant and affordable. Production in the Commonwealth doubled in just five years, between 2013-2017, and the state now meets more than 20 percent of the nation's demand for natural gas. This positive trend has improved our environment and created significant benefits for consumers, including an annual average energy cost savings of \$1,200 for Pennsylvania families.

Oil and natural gas producers in Pennsylvania are ready to build upon the success of Earth Day, using advanced technologies to safely generate the energy needed to power the lives of tens of millions of Americans.