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FACTS**



# Changing the Climate Change Trajectory: How Natural Gas and Oil are Part of the Solution

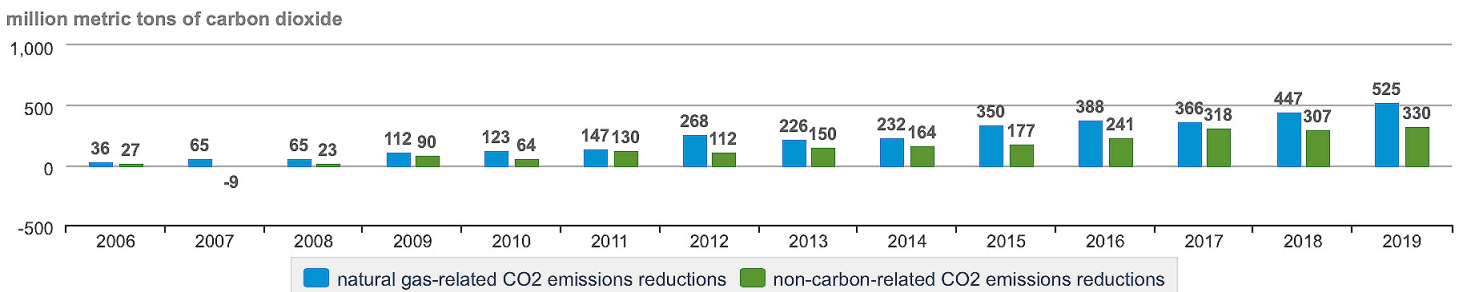
Oil and natural gas producers, pipelines and utility companies are all part of the nation’s climate change solution, and have been for years. The industry has reduced CO2 and methane emissions from operations despite increasing production by a staggering amount, and the increased use of natural gas for electricity production.

The evidence, primarily from data compiled by the U.S. Energy Information Administration, tells a success story – cleaner air and reduced CO2 and methane emissions along with more use of natural gas.

According to EIA, the CO2 generated per unit of electricity in the US dropped between 2005-2016 from 1,300 pounds of CO2/megawatt hour to 910 pounds, a decrease of 30 percent. This is due to the use of more natural gas to meet our electricity demand, which increased by 60 percent between 2010-2017, from 988 billion kilowatt hours to 1,582 billion kilowatt hours.

The U.S. Environmental Protection Agency reports that methane emissions from the nation’s onshore and offshore oil and gas operations between 2011-2016 dropped by 14 million metric tons, a testament to the fact that the energy industry continues to improve technology to control methane emissions from all aspects of its operations.

## CO2 emissions reductions in electricity generation from changes in the fuel mix since 2005



The increased use of natural gas for electricity generation has resulted in significant decreases of CO2 emissions since 2005 (blue bar on chart), removing 525 million metric tons (MMmt) of CO2 in 2019, and totaling more than 3,350 MMmt nationwide over the 14-year period. (Source: U.S. Energy Information Administration)

Scientists estimate that methane leaks from all natural gas-related operations must be below 3.2 percent total to ensure realization of the environmental benefits from the increased use of natural gas. Fourteen (14) independent studies, including academia and government agencies, determined the rate was only 1.4 percent.

**THE FACTS ARE CLEAR: natural gas helps our nation battle climate change now and will continue to do so in the future by providing a clean, reliable and affordable source of electricity and by using technology to control methane leakage.**

115 VIP Drive, Suite 210,  
Northridge Office Plaza II  
Wexford, PA 15090-7906  
(724) 933-7306 | Fax (724) 933-7310  
www.pioga.org | info@pioga.org