

Ohio's Methane Pollution Problem

Reducing oil and gas methane emissions benefits Ohio communities

Methane is the main component of natural gas, and methane pollution—from leaky equipment or intentional venting—is a senseless waste of a valuable American energy resource. A producer of oil and natural gas, Ohio can benefit from policies that clean up methane pollution.

Put gas to work in our homes, not our atmosphere.

In 2014 Ohio's natural gas producers reported wasting more than 13,000 metric tons of methane.ⁱ This is enough natural gas to heat nearly 8,500 Ohio homes.ⁱⁱ This number is likely an underestimate because only large oil and gas operations are required to report their emissions, but methane leaks can occur from wells and equipment of all sizes.

We can't stop climate change without tackling methane.

Methane is a potent climate pollutant. Over the next two decades, methane will trap over 80 times more heat in the atmosphere than the same amount of carbon dioxide.ⁱⁱⁱ Methane is responsible for about a quarter of the global warming we are already experiencing.^{iv}

The oil and gas industry is the leading industrial source of methane pollution,^v and if action isn't taken, methane pollution from this industry is projected to increase around 25% over the next 10 years.^{vi}

Ohio has taken action on air pollution.

In 2014 Ohio adopted important steps to reduce air pollution by requiring oil and gas operators to regularly check for and fix equipment leaks.^{vii} And the state recently proposed expanding these leak detection requirements to other types of oil and gas equipment,^{viii} and to capture emissions from oil producing wells and natural gas compressor stations as well.

“We just thought we needed to be aggressive... to make sure that all phases of the development and transmission of oil and gas were minimizing methane emission escape.”

—Ohio EPA director^{ix}

There are economic benefits to capping industry's air pollution.

There are proven-cost effective technologies already at work that can cut methane pollution in half over the next few years,^x and many of them are developed in Ohio. Fifteen Ohio companies across the state specialize in fixing the problem and are helping power the local economy by providing highly skilled, good-paying jobs.^{xi}

States across the country, including Ohio, are already proving we can enact smart emission standards and continue to have strong economic growth. Jobs in oil and gas extraction have continued to grow in Ohio since the state enacted its leak detection requirements.^{xii}



Reducing methane can also reduce ozone.

Many Ohio counties currently have ozone—or smog--levels that exceed national health-based standards, and emissions from oil and gas drilling are contributing to the problem. That's because when methane escapes from oil and gas equipment, it often does so with other harmful pollutants that increase smog levels.^{xiii}

In the oil and gas producing counties with the worst air quality—there are nearly 4,000 active wells with pollution that put approximately 15% of Ohio's population at increased risk^{xiv} for developing breathing and other respiratory problems. Reducing this pollution will help improve health outcomes for Ohio's most vulnerable communities.

Ohioans should support smart policies that reduce emissions.

The U.S. Environmental Protection Agency recently proposed national methane emission limits for new and modified oil and gas sources, an important first step toward reducing this harmful pollution across the country.

Ohioans should support these strong federal efforts to cut methane and should push for further action to control emissions from existing oil and gas equipment.

“The [U.S. EPA] rules won't impose undue costs on oil producers, and would do the minimum required to abate the effects of climate change. If anything, they aren't strict enough.”

—Toledo Blade^{xv}

Together, strong state and federal rules can ensure the oil and gas industry is minimizing waste, and yield significant air quality and economic benefits for Ohioans and all Americans.

ⁱ <http://www2.epa.gov/ghgreporting> Data from Subpart W GHG Reported Data. Emissions allocated to each state based on percentage of production from each basin in the states.

ⁱⁱ Average gas use per household in Ohio calculated using number of natural gas consumers by state, EIA website http://www.eia.gov/dnav/ng/NG_CONS_NUM_A_EPGO_VN4_COUNT_A.htm and natural gas consumption in Ohio: http://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SOH_a.htm.

ⁱⁱⁱ IPCC AR5 p. 714 https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5_Chapter08_FINAL.pdf

^{iv} EDF calculation based on [IPCC AR5](#) WGI Chapter 8.

^v EPA website: Overview of Greenhouse Gases <http://www3.epa.gov/climatechange/ghgemissions/gases/ch4.html>

^{vi} White House fact sheet: <https://www.whitehouse.gov/the-press-office/2015/01/14/fact-sheet-administration-takes-steps-forward-climate-action-plan-anno-1>

^{vii} Sample permit available at Ohio.gov http://www.epa.ohio.gov/dapc/genpermit/Oil_Gas_GP121.aspx

^{viii} Permits Available for Early Comment, Proposed General Permits for Natural Gas Compressor Stations and Similar Facilities <http://epa.ohio.gov/dapc/genpermit/permitsec.aspx>

^{ix} Midwest Energy News: "Q&A: Ohio's EPA director on 'nonstop' federal regulations" published 10/14/15 <http://midwestenergynews.com/2015/10/14/qa-ohio-epas-priorities-for-the-electric-industry/>

^x Waste Not report, from Clean Air Task Force et al. <http://catf.us/resources/publications/files/WasteNot.pdf>

^{xi} Datu Research report: 'The Emerging U.S. Methane Mitigation Industry' https://www.edf.org/sites/default/files/us_methane_mitigation_industry_report.pdf

^{xii} Census.gov North American Industry Classification System, Sector 21 -- Mining, Quarrying, and Oil and Gas ExtractionT 21111 Oil and Gas Extraction <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=21111&search=2012%20NAICS%20Search>

^{xiii} EPA, Basic Information, Emissions from the Oil & Natural Gas Industry <http://www3.epa.gov/airquality/oilandgas/basic.html>

^{xiv} Ozone daily value (DV) data from EPA (<http://www3.epa.gov/airtrends/values.html>). Counties with active oil and gas wells were cross-referenced with 2012-2014 DVs above 70 ppb* with counties that have active O&G according to DrillingInfo HPDI Data and then found the populations of those counties per the US census www.census.gov.

*70 ppb is the new standard per the EPA announcement; however, this standard is not yet enforced as the EPA has not re-designated NAA based on this new threshold or updated DVs.

^{xv} Toledo Blade Editorial "Rein in Methane" Published 9/5/15 <https://www.toledoblade.com/Featured-Editorial-Home/2015/09/05/Rein-in-methane.html>