Testimony of the
Marcellus Shale Coalition

Submitted to the
House Environmental and Natural Resource Protection Committee

April 21, 2026

The Marcellus Shale Coalition (MSC) is a state-wide trade association representing more than 155 energy companies from the upstream, midstream, and downstream sectors, and those who supply goods and professional services to the industry, including our partners in the skilled building trades. Our members are fully committed to working with local, county, state and federal government officials to facilitate the safe development of natural gas resources in the Marcellus, Utica and related formations.

On behalf of the MSC and its members, we appreciate the opportunity to share this testimony with the committees regarding the issue of methane emissions from the oil and gas industry.

We express our appreciation to Chairman Rader for ensuring that – in a hearing focused on the oil and gas industry – there is at least one voice that is actually *from* the oil and gas industry. The Pennsylvania Independent Oil and Gas Association is well versed on this topic and will be invaluable for the Committee's education and understanding of this issue. However, it is disappointing that, on a topic as important as this, the committee continues to overwhelmingly solicit views not from technical professionals engaged in the underlying subject matter, but rather anti-energy activists that seek to ban domestic oil and gas production.

Introduction

What, exactly, is methane?

Methane is, quite simply, natural gas. You will hear from a litany of activists that engage in linguistic gymnastics to call it something else in casual conversation, like 'fracked' gas or 'methane gas'. These focus-group tested terms are intended to subconsciously create negative impressions in the mind of the general public as to the value and virtue of natural gas.

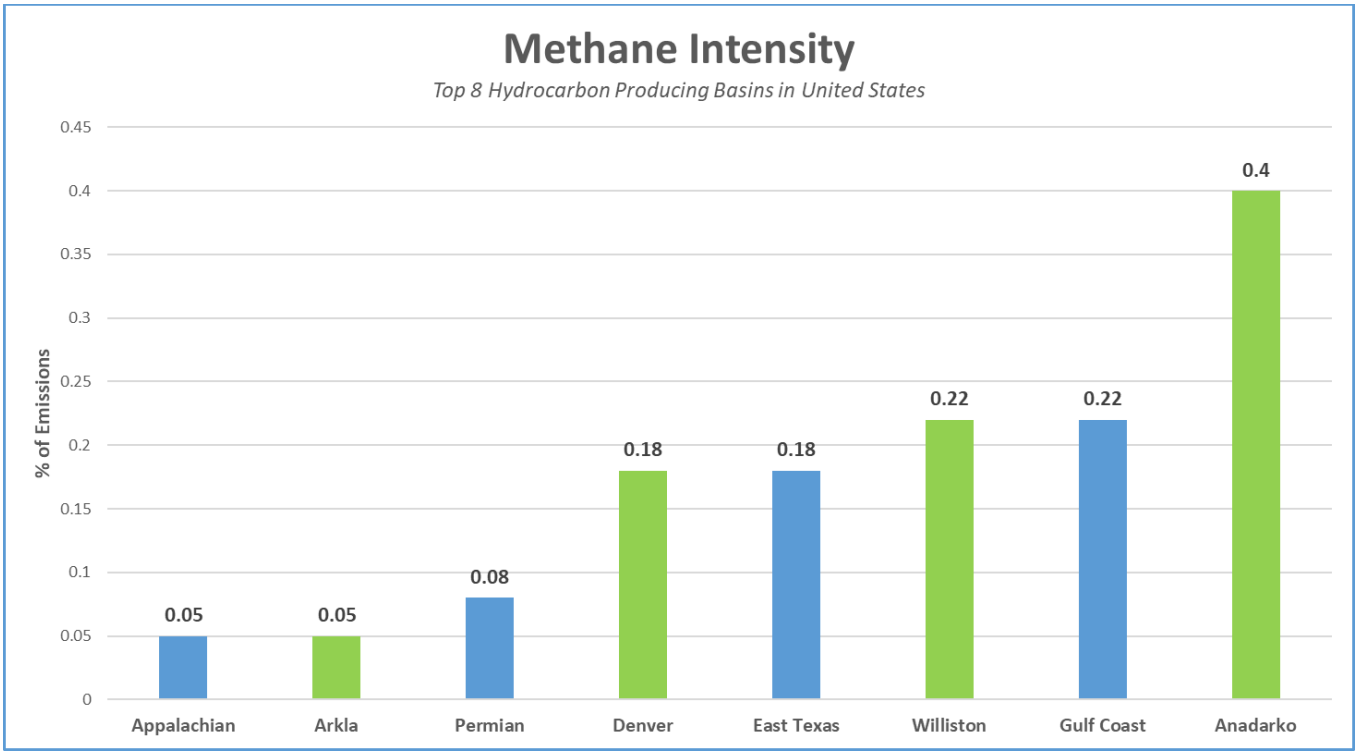
The natural gas produced in Pennsylvania differs based on geographic location, largely driven by the geologic aging of the underground resource. In northcentral and northeastern Pennsylvania, natural gas can be comprised of between 95% - 98% methane and is usually referred to as 'dry gas'. In parts of southwestern Pennsylvania, the natural gas may be comprised of 80%-85% methane, with the balance of produced gas containing ethane, propane, butane, pentane, natural gasoline and other hydrocarbons. This product is typically referred to as 'wet gas' because these added resources are separated and liquified for an abundance of commercial uses.

Natural gas (methane) is the very product that Pennsylvania's unconventional shale industry is in the business of producing. Pennsylvania's shale gas resources are unique compared to many other basins across the country because most of those basins produce both oil and natural gas. While there is a growing amount of information that will inform whether some shale formations underlying Pennsylvania might be capable of oil production in the future, as of today Pennsylvania's shale industry is exclusively producing natural gas.

Why is this important? Because Pennsylvania operators are solely focused on natural gas production and therefore have every incentive to capture as much of the natural gas produced as possible. It is simply not good business to let the very product you are producing escape into the atmosphere.

It is also important to recognize that the men and women in the Pennsylvania natural gas industry live, work and raise their families here. They are invested in their communities and take pride in being good stewards of their environment.

As a result, the Appalachian Basin has been recognized by third party evaluators[1] as having the lowest methane intensity of any major natural gas producing basin in the United States:



[1] Clean Air Task Force & Ceres: Benchmarking Methane & other GHG Emissions – June 2024

This conclusion was recently reinforced by the release of the Appalachian Basin Initiative's (AMI) second annual report[2]. The data examined covered over 17,000 unique sites and nearly 32,000 square miles and was analyzed by the University of Texas at Austin in collaboration with Colorado State University. Both are nationally recognized experts in this subject area.

Data continually reinforces that natural gas produced in the United States has a significantly lower methane intensity than foreign-produced natural gas. For example, while much focus has understandably been on the need for Europe to wean itself from Russian natural gas for national security purposes, it turns out that there is a huge environmental benefit as well. According to the International Energy Agency, Russian-produced natural gas has a methane intensity that can be 65% *higher* than U.S. produced natural gas – and exponentially higher than that when compared to Pennsylvania-produced natural gas.

Industry-Led Best Practices

In addition to complying with all state and federal statutes and regulations that govern air quality, Pennsylvania's natural gas industry has long led the effort to elevate its performance, apply emerging technologies and best practices, and further reduce emissions.

Examples of these practices include but are not limited to:

- Eliminating venting and flaring by directing the natural gas which flows back during well completion activities directly into pipelines.
- Developing best practices for wellhead unloading operations to minimize venting and flaring.
- Using vapor recovery and destruction systems with compressor venting, dehydration, truck loading, tanks and other processes to control volatile organic compounds. This process has a significant co-benefit of reducing methane emissions.
- Using air instead of natural gas for pumps and pneumatic controllers.
- Using Leak Detection and Repair programs to identify and repair leaks.

In addition to these steps and other best practices, operators are engaged in a variety of air emission monitoring activities, including the use of advanced methane detection technologies. This is done through a combination of real-time emission monitoring systems, conducting routine aerial monitoring (drone, helicopter, fixed wing, and satellite) to identify potential leaks or anomalies, assessing process improvements and mitigation opportunities and working with third party certification companies (e.g. Carbon Mapper) to evaluate the success and progress of these measures.

[2]March 20, 2026: https://www.prnewswire.com/news-releases/appalachian-basin-once-again-conrmed-as-lowest-methane-intensity-major-oil-and-gas-basin-in-the-united-states-302719514.html

Most, if not all, of the MSC's operator companies belong to one or more voluntary initiatives to further reduce emissions like methane. Examples of these initiatives include AMI, the Oil and Gas Methane Partnership, One Future, The Environmental Partnership, Natural Gas STAR, and others.

Within the MSC, our operators and the professional contractors they work with are focused on continually raising the bar with respect to performance and emissions reductions. Our Air Quality Committee leads these efforts by engaging directly with regulators to help them better understand the dynamics of this industry and help industry participants understand their reporting and compliance obligations.

The Committee has created a variety of workgroups focused on specific aspects of air quality, including compliance, emerging technologies, and emissions inventories. It has also featured a number of technology and best practices seminars for the benefit of both other industry participants and regulatory staff.

In addition, workgroups are formed to assist with the implementation and compliance of key regulatory actions, such as the revision and creation of air quality permits for the industry (GP-5 and GP-5A), the U.S. EPA methane rule, the U.S. EPA existing source and new source rules, and Leak Detection and Repair obligations.

Putting Methane Emissions into Perspective

Methane emissions should be evaluated in the context of all sources, both human-induced and naturally emitting sources. For example[3]:

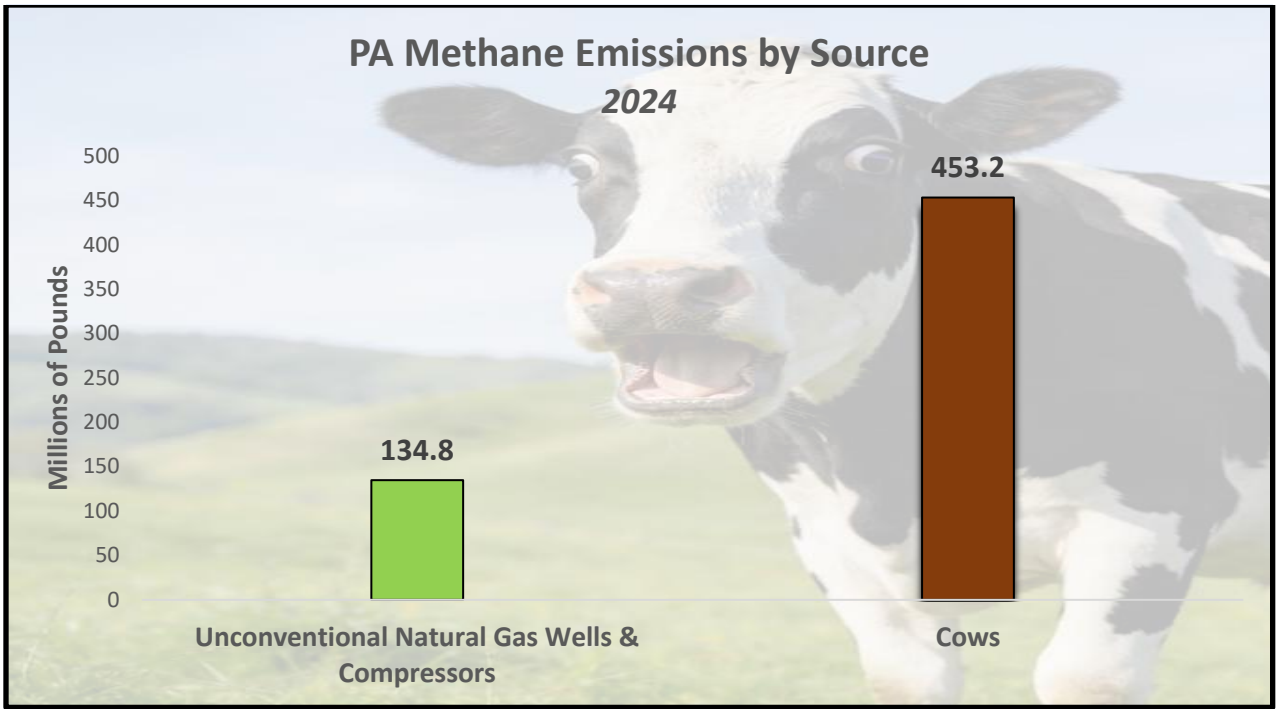
- Agriculture accounts for roughly 35% of human-induced methane emissions in the United States, roughly twice the contribution from natural gas production and processing.

- U.S. methane emissions from all human-induced sources are down 19% since 1990; this despite the fact that U.S. natural gas production has more than doubled over this time period.

- Wetlands are the single largest source of total methane emissions in the United States, responsible for roughly33% of all emissions.

- According to the PA DEP emissions inventory, Pennsylvania cows emit more than three times[4] the amount of methane as Pennsylvania's unconventional wells and compressor stations combined.

[3] Date sources include U.S. EPA and NASA
[4] PA DEP Emissions Inventory; UC Davis



Conclusion

Pennsylvania policymakers should be proud of the performance of the Commonwealth's unconventional natural gas industry and its commitment to meet and exceed compliance obligations. As demonstrated above, Appalachian produced natural gas is the cleanest in the nation and by extension, among the if not the cleanest in the entire world.

As a result, natural gas production continues to increase even as methane emissions continue their significant downward trend. This production is essential to meeting the energy needs of the nation, safeguards them against dependence on distant states or nations, and has contributed to historic improvements in our air quality. We urge this committee and the General Assembly to recognize and celebrate these successes, and work to ensure that Pennsylvania natural gas can continue to be produced safely and responsibly to meet the energy needs of our fellow citizens.

Respectfully Submitted,

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