Methane **Emissions Commitments**



Members of the Interstate Natural Gas Association of America (INGAA) commit to continuously improving practices to minimize methane emissions from interstate natural gas transmission and storage operations in a prudent and environmentally responsible manner.

To further reduce methane emissions from natural gas transmission and storage facilities while maintaining pipeline integrity, safe operations and minimizing adverse customer and community impacts, INGAA member companies commit to the following:

Pipelines & Pneumatic Controllers

Minimizing methane emissions from natural gas pipelines and pneumatic controllers

- Maintaining safe and efficient operations while minimizing methane emissions from interstate natural gas pipelines during maintenance, repair or replacement (a practice commonly referred to as a "blowdown") by evaluating and implementing voluntary practices, such as those found in the U.S. Environmental Protection Agency's (EPA's) Natural Gas STAR Program.
- Selecting air-driven, low-bleed or intermittent pneumatic controllers when installing new
 pneumatic controllers, unless a different device is required for safe operations. For existing
 high-bleed pneumatic controllers, INGAA members will evaluate the feasibility of replacing
 them with air-driven, low-bleed or intermittent controllers.

Storage & Compressor Stations

Minimizing methane emissions from natural gas storage wells and compressor stations

- Minimizing emissions from natural gas transmission and storage compressor stations, where practical, prior to conducting planned maintenance.
- Minimizing methane emissions from rod packing seals on all reciprocating compressors
 at transmission and storage facilities. Member companies agree to replace rod packing on all
 transmission and storage reciprocating compressors by utilizing one of the following options:
 (1) a condition-based replacement approach; (2) replacing packing every 26,000 hours of
 operation; or (3) replacing packing 36 months from the date of the most recent rod packing
 replacement.
- Conducting leak surveys at transmission and storage compressor stations to reduce emissions by evaluating leaks and taking corrective actions. INGAA member companies will perform leak surveys at all transmission and storage compressor stations owned and operated by INGAA member companies by 2022.
- Conducting leak surveys at all natural gas storage wells owned and operated by INGAA member companies by 2025.

R&D and Information Sharing

Developing effective practices and sharing information

• Reporting their methane emissions transparently. INGAA member companies will also continue to collaborate within the membership and with other organizations on research and development (R&D) to identify effective practices to detect and reduce methane emissions. INGAA member companies are analyzing the data reported under EPA's Greenhouse Gas Mandatory Reporting Rule to improve this information and identify additional opportunities to reduce methane emissions.

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Regulatory Compliance & Voluntary Commitments

INGAA member companies are regulated by various state and federal agencies. Among other requirements, they currently implement risk management programs and conduct monitoring, inspection and maintenance at natural gas pipeline and storage facilities. INGAA member companies also comply with applicable requirements to report methane emissions as part of the EPA's Greenhouse Gas Mandatory Reporting Rule and applicable state programs.

INGAA member companies have a history of working with these regulators to ensure that natural gas pipelines, compressor stations and storage facilities are designed and built safely and operate in ways that minimize methane emissions. As regulatory requirements evolve, INGAA member companies are committed to working with regulators to identify appropriate enhancements to reduce the risk of leaks, improve detection methods and enhance standard practices.

INGAA member companies have agreed to these voluntary commitments because it is socially and environmentally responsible and good business for natural gas transmission and storage companies to reduce methane emissions. By measuring and monitoring emissions over two decades, INGAA member companies have gained knowledge about potential sources. This experience has enabled the industry to target sources with the greatest potential for emissions improvements and implement cost-effective reduction strategies. As a result, the transmission and storage sector of the natural gas industry reduced its met hane emissions by 44 percent from 1990 to 2016, according to the EPA, even while total U.S. natural gas consumption increased by 43 percent during the same time frame.

Additional Voluntary Methane Reduction Programs

In addition to these commitments, some INGAA member companies participate in voluntary programs intended to reduce methane emissions, such as the EPA's Natural Gas STAR and Methane Challenge Programs or the ONE Future Coalition.

The Natural Gas STAR Program is a voluntary partnership between the EPA and the oil and natural gas industry. It is designed to encourage companies to adopt cost-effective technologies and practices to improve operational efficiency and reduce methane emissions. Participating INGAA member companies voluntarily report emissions under the EPA Natural Gas STAR and Methane Challenge Programs.

Members of the ONE Future Coalition are working collectively to achieve a science-based average rate of methane emissions across their facilities equivalent to 1 percent (or less) of total natural gas production.

INGAA Members

- BHE GT&S
- Boardwalk Pipeline Partners
- Cheniere Energy, Inc.
- DTE Midstream
- Duke Energy
- Enable Midstream Partners
- Enbridge

- · Equitrans Midstream
- Iroquois Pipeline Operating Company
- Kinder Morgan
- Millennium Pipeline Company L.L.C.
- National Fuel Gas Company
- National Grid

- NextEra Energy Resources
- ONEOK
- Pacific Gas and Electric Company
- Sempra LNG & Midstream, LLC
- Southern Company Gas
- Southern Star Central Gas Pipeline, Inc.

- The Williams Companies, Inc.
- TC Energy Corp US Pipelines
- UGI Energy Services, LLC
- · WBI Energy, Inc.

INGAA is a trade organization that advocates regulatory and legislative positions of importance to the natural gas pipeline industry. INGAA's members represent the majority of the interstate natural gas transmission pipeline companies in the United States, operating approximately 200,000 miles of pipelines and serving as an indispensable link between natural gas producers and consumers.





