Atmos Energy has compiled this standalone report to provide targeted information to the public on our efforts to monitor, control, and reduce methane emissions.

Please visit our website at atmosenergy.com to see our Corporate Responsibility and Sustainability Report and learn more about our overall climate-related emissions as well as more general information about Atmos Energy’s sustainability activities.
Atmos Energy is committed to practices that reduce methane emissions from our transmission and distribution systems, including infrastructure renewal programs to replace aging steel and cast iron distribution pipelines.

As part of Atmos Energy’s efforts to reduce methane emissions, we joined the Environmental Protection Agency’s (EPA) Natural Gas Methane Challenge Program as a founding partner in March 2016. As part of the Natural Gas Methane Challenge Program, a voluntary partnership that encourages oil and natural gas companies to improve efficiency and reduce methane emissions, Atmos Energy set a goal to replace cast iron and unprotected steel mains at an annual rate of 1.5 percent. We have performed, and expect to continue to perform, above our stated goal. In 2020 Atmos Energy joined ONE Future, which is a coalition of natural gas companies working together to voluntarily reduce methane emissions across the natural gas value chain. In addition, Atmos Energy has a goal to reduce methane emissions by 50 percent from 2017 to 2035 in its natural gas distribution system.* The Corporate Responsibility, Sustainability & Safety Committee of the Board of Directors oversees these goals as well as the Company’s other sustainability and environmental practices. The Committee’s charter can be found on atmosenergy.com.

Investing in Technology to Improve Safety

Atmos Energy utilizes state-of-the-art instrumentation for leak detection, monitoring, and leak grading to enhance safety for the public, our customers and employees, and to protect the environment. Atmos Energy reviews advances in technology as they are brought to market and incorporates them as deemed appropriate for our leak detection and monitoring efforts. This includes advanced mobile leak detection technology, including cavity ring-down spectroscopy (CRDS) for surveying our distribution system that is 1,000 times more sensitive than legacy technologies. As of December 31, 2019, Atmos Energy had 13 advanced mobile leak detection technology units mounted and operating in vehicles.

To monitor compressors and storage fields, we use FLIR cameras as well as RMLD, FID, and CGI equipment. RMLD, CGI, CRDS, and OMD equipment is used to conduct inspections and surveys of buried natural gas distribution and transmission pipelines. The equipment utilized to perform leak surveys is dependent on several different criteria, including but not limited to safety, weather, instrument capabilities, location, application, and operating experience.

Leak Detection Technologies we use:

- Remote methane leak detection (RMLD)
- Flame ionization detector (FID)
- Combustible gas detector (CGI)
- Optical methane detector (OMD)
- Forward-looking infrared camera (FLIR)

*Based on 2017 DOT inventory, projected 2035 inventory, and calculated using 40 CFR 98, Subpart W Natural Gas Distribution Emission Factors. The 2017 baseline is 35,386 MT CH4.
New Technologies Keep Everyone Safer

We are working with industry and technology partners to develop and evaluate new technologies to enhance safety. For years we have partnered with the Gas Technology Institute, which develops technology-based solutions for the natural gas industry. We were among the early participants in our industry to evaluate technologies that had the potential to be adapted to our business. This partnership has produced tools we are incorporating into our daily processes, such as mobile technology that captures critical infrastructure data during construction and operations.

Modernizing Infrastructure Reduces Carbon Footprint

Replacing pipelines reduces leaks and methane emissions. We track and report greenhouse gas emissions in accordance with the Environmental Protection Agency’s (EPA) Greenhouse Gas Reporting Rule, which requires reporting of greenhouse gas data and other relevant information from large sources and suppliers in the United States. In addition, all of our operating divisions report to various state agencies that have environmental jurisdiction over our activities.

Since 2012, we’ve replaced over 4,400 miles of pipe. Over the next five years, we plan to replace between 5,000 and 6,000 miles of distribution and transmission pipes. Included in this total is the replacement of all remaining cast iron main by the end of 2021. To determine the schedule for non-cast iron pipeline replacements, we use a risk-based prioritization model that considers factors like the pipe’s age, location, material, leak history, environmental factors, and more.
Leak Detection

Atmos Energy surveys the approximately 75,000 miles of our distribution and transmission pipelines at rates and frequencies that meet and often exceed state and federal guidelines. Monitoring frequency of pipelines is determined by federal and state pipeline safety codes, accepted industry standards, and internal Atmos Energy practices and procedures. The technology used to complete a pipeline leak survey may vary, depending on the conditions at the time of survey. It is our practice to use the instrument that is best suited for the existing conditions to complete pipeline surveys. Here is a brief summary of the frequency of leak surveys of our transmission and distribution systems:

Transmission Pipelines

- In many of our more densely populated areas, transmission pipelines are visually surveyed twice per month and incorporate the use of aircraft, where appropriate, to look for oxygen-starved vegetation, right-of-way encroachment, erosion, landslides, and possible security threats.
- Our Mississippi and West Texas divisions use aircraft to leak survey annually. Our Atmos Pipeline – Texas and Mid-Tex divisions use aircraft to leak survey twice per year.
- Technicians leak survey all pipeline road crossings quarterly using the appropriate leak survey equipment.
- Atmos Energy also completes annual visual vegetation/leak surveys on all transmission pipelines using highly trained technicians performing patrols.

Distribution Pipelines

- Distribution mains located outside of business districts are surveyed at least as often as prescribed by federal and state regulations (with the maximum being five years) using the various technologies discussed on page 2 of this report.
- For distribution pipelines located within business districts, a survey is required and completed at least annually.
- Our Texas jurisdictions, Mid-Tex and West Texas, contain over 95 percent of our unprotected steel distribution pipe inventory and Mid-Tex contains 100 percent of our remaining cast iron pipe inventory. In these jurisdictions, we leak survey at intervals that are more frequent than the federal requirements. For coated steel pipe, we survey at least once every three years, bare steel we survey at least once every two years, and cast iron at least once every 12 months. We are committed to replacing all remaining cast iron main by 2021.
- In Texas, distribution main segments that are identified as high relative risk are scheduled for replacement or they are leak surveyed within 12 months.
- In Kansas, coated steel pipe and plastic pipe are surveyed at least once every three years, and bare steel is surveyed at least annually.
- For our other jurisdictions, we leak survey at least as often as state regulations prescribe. However, we evaluate performing leak surveys in accordance with the more stringent regulations of other states in our footprint.
Grading a Leak

Leaks identified on the Atmos Energy transmission and distribution systems are investigated and graded in accordance with our procedures, which meet or exceed the requirements of state or federal regulation. As required by regulation, these procedures categorize leaks in three grades:

1. **Grade 1**
   - Leaks which represent an immediate hazard to persons and/or property. These leaks are addressed and repaired immediately.

2. **Grade 2**
   - Leaks recognized as being non-hazardous at the time of detection but having the potential to become a future hazard. In general, these leaks must be scheduled for repair or eliminated within one year. Our Kansas, Mid-Tex, and West Texas distribution systems collectively make up 60 percent of our total distribution system. Grade 2 leaks on these systems are repaired within six months.

3. **Grade 3**
   - Leaks that are non-hazardous at the time of detection and can be expected to remain non-hazardous. Grade 3 leaks on our Kansas, Mid-Tex, and West Texas distribution systems are repaired within three years and some within two and a half years. In jurisdictions that do not prescribe a repair interval for Grade 3 leaks, we target these to be repaired within 36 months.

At Atmos Energy compressor stations subject to New Source Performance Standard Subpart OOOOa, leak surveys are conducted quarterly using a FLIR camera. Any detected leaks are tagged. Leaks are repaired within 30 days of detection or as soon as repair parts can be obtained. Any component found to be leaking is checked using a soap and water test within 30 days after it has been repaired. Annual reports summarizing the results of all leak surveys are submitted to state regulatory authorities.
Frequency of Monitoring

The frequency of monitoring conditions along our transmission right-of-ways (ROWs) is based on criteria documented in our O&M Manual that have been established to meet or exceed federal and state regulations. Inspections and maintenance work are performed regularly and pipeline segments are replaced when deemed necessary to maintain the safe delivery of natural gas to Atmos Energy customers.

The Atmos Energy Federal Pipeline Integrity Management (PIM) program provides for enhanced preventive and mitigative measures already in place to maintain the safe and reliable operation of our transmission pipeline system. The PIM program includes risk modeling that takes into account both the risks posed to our pipeline systems and the potential impacts of those risks. High consequence areas (HCAs) along the pipeline are typically densely populated areas or rural areas containing identified sites adjacent to the pipeline that pose considerably more risk to human life. Identified sites may be churches, schools, hospitals, daycare centers, assisted-living facilities, campgrounds, or other buildings and outside areas where people congregate. Additional inspections of pipelines within HCAs, as well as certain pipelines outside of HCAs, are conducted in accordance with the Atmos Energy federal and state PIM programs.

The frequency of monitoring the conditions of our distribution pipelines is based on our O&M Manual and our Distribution Integrity Management (DIM) program, both of which have been established in conjunction with federal and state regulations. Distribution pipeline segments are regularly subjected to inspection and maintenance work, such as leak surveys and corrosion control, and are replaced as necessary. Our DIM program includes risk modeling that takes into account both the risks posed to our distribution pipeline systems and the potential consequences of those risks.

Commitment to Safety and Protecting Our Environment

We are committed to replacing all remaining cast iron main by the end of 2021.

In addition, Atmos Energy utilizes a number of practices in its day-to-day operations to prevent or reduce methane emissions. Some of the practices include, but are not limited to, the following:

• Drawing down transmission line pressure when repairing or working on the pipelines to reduce natural gas released to the atmosphere.
• Rerouting gas to minimize or prevent venting or blowdowns.
• Installing pipeline stopples and bypasses as necessary to maintain operations and minimize extent of blowdown.
• Utilizing flares to combust methane instead of releasing methane to the atmosphere.

Finally, the Company’s methane emissions intensity rates for 2019 are as follows:

• Atmos Energy – 0.40 percent based on the amount of natural gas received at city gate stations (34,134 MT CH4 total emitted in 2019).
• The emission intensity is calculated using EPA-reported fugitive emissions data and Company data of natural gas distribution system volumetric throughput. The EPA-reported emissions data is based on a combination of EPA emission factors and data calculated using the leak testing described above.

You may find more information on our commitment to pipeline safety on our website at atmosenergy.com.
CAUTIONARY STATEMENT

This material includes forward-looking statements. These statements can be identified because they use words such as “anticipate,” “believe,” “estimate,” “may,” “could,” “expect,” “forecast,” “target,” “goal,” “intend,” “objective,” “plan,” “projection,” “seek,” “strategy,” or similar words. Similarly, statements that describe future plans or strategies and future emissions reductions are forward-looking statements. Such forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in the statements. These risks and uncertainties include the following: federal, state, and local regulatory and political trends and decisions; increased federal regulatory oversight and potential penalties; possible increased federal, state, and local regulation of the safety of our operations; the impact of climate change; the impact of greenhouse gas emissions or other legislation or regulations intended to address climate change; possible significant costs and liabilities resulting from pipeline integrity and other similar programs and related repairs; increased dependence on technology that may hinder the Company’s business if such technologies fail; our ability to continue to access the credit and capital markets to execute our business strategy; the impact of adverse economic conditions on our customers; and other risk factors discussed under Part I, Item 1A, Risk Factors, and Part II, Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations, Cautionary Statement for the Purposes of the Safe Harbor under the Private Securities Litigation Reform Act of 1995 in our Annual Report on Form 10-K for the fiscal year ended September 30, 2020, which should be read in conjunction with the forward-looking statements in this report. Atmos Energy undertakes no obligation to update or revise any of our forward-looking statements whether as a result of new information, future events, or otherwise.