

ANNUAL REPORT 2019

Improving the Natural Gas and Oil Industry's Environmental Performance

Preview

MISSION

To continuously **improve the industry's environmental performance by taking action, learning about best practices and technologies, and fostering collaboration** in order to responsibly develop our nation's essential natural gas and oil resources.

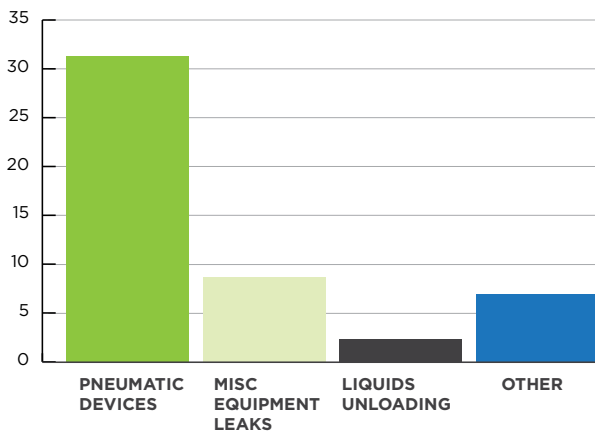


Achieving Environmental Progress

The U.S. natural gas and oil industry is committed to the protection of human health, safety and the environment. Even as the U.S. is leading the world in natural gas and oil production, methane emissions have fallen, thanks to industry leadership and investment in new technologies.

Seeking to build on this success, a group of 26 natural gas and oil production companies formed The Partnership in December 2017. These companies committed to continuously improving their environmental performance.

Figure 1.
EPA's GHGRP 2017 CH₄ Emissions (MMT CO₂E*)



*MMT CH₄ to MMT CO₂E using IPCC-AR5 GWP of 28
Source: U.S. EPA Greenhouse Gas Reporting Program. Accessed April 29, 2019

Environmental Stewardship

The Partnership implemented three programs on January 1, 2018, that target emissions through collaboration, proven methods and advanced technology.

These programs were selected based on EPA emissions data (see Figure 1) and are designed to further reduce emissions using proven, cost-effective controls targeting three of the most significant sources of emissions.

They consist of the following:

- **Leak Detection and Repair:** Participants committed to leak monitoring, followed by timely repair, at select sites using detection methods and technologies such as portable analyzers or optical gas imaging cameras.
- **Focus on High-Bleed Pneumatic Controllers:** Participants committed to replace, remove, or retrofit high-bleed pneumatic controllers with intermittent, low, or zero-emitting devices.
- **Improving the Manual Liquids Unloading Process:** Participants committed to implement an industry best practice that minimizes emissions associated with the removal of liquids that, as a well ages, can build up and restrict natural gas flow.

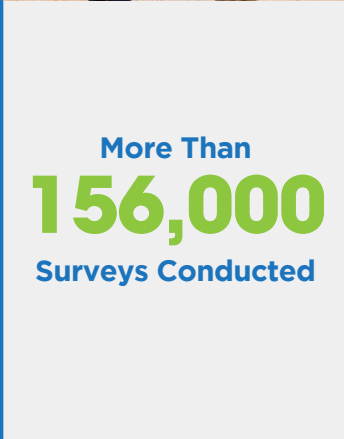
2018 Environmental Performance Highlights



0.16%
Leak Occurrence
Rate



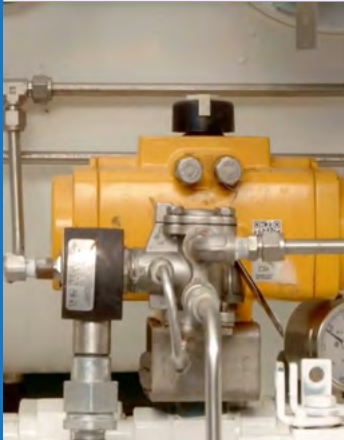
More Than
78,000
Sites Surveyed



More Than
156,000
Surveys Conducted



More Than
56
million
Components
Inspected



More than
28,000
High-Bleed Pneumatic
Controllers Replaced,
Retrofitted, or
Removed From
Service to 2018



In 2018, More Than
3,000
Additional High-Bleed
Pneumatic Controllers
Replaced, Retrofitted,
or Removed from
Service



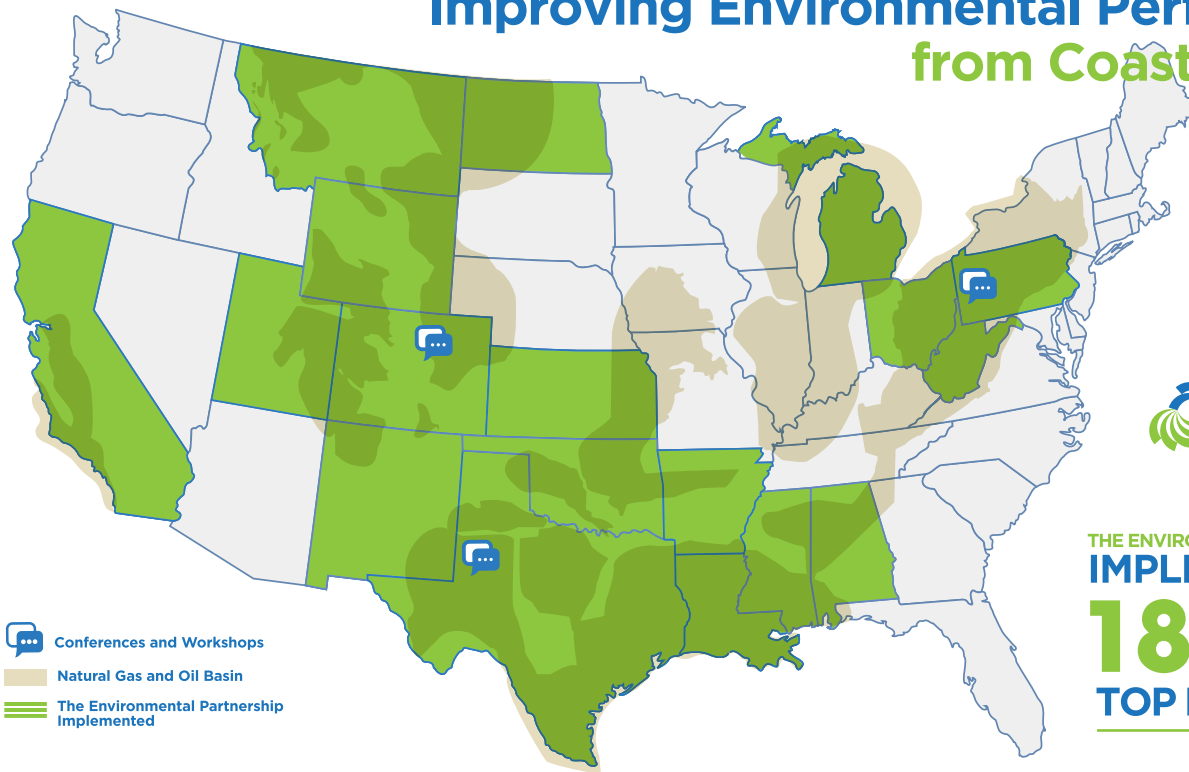
38
Participating
Companies No Longer
Have High-Bleed
Pneumatic Controllers
In Their Operations



Emissions
Minimized
By Monitoring
More Than
132,000
Manual Liquids
Unloading
Events In 2018



Improving Environmental Performance from Coast to Coast



THE ENVIRONMENTAL PARTNERSHIP
IMPLEMENTED IN
18 of 21
TOP PRODUCING
STATES

- Conferences and Workshops
- Natural Gas and Oil Basin
- The Environmental Partnership Implemented

Learning Together To Reduce the Industry's Footprint

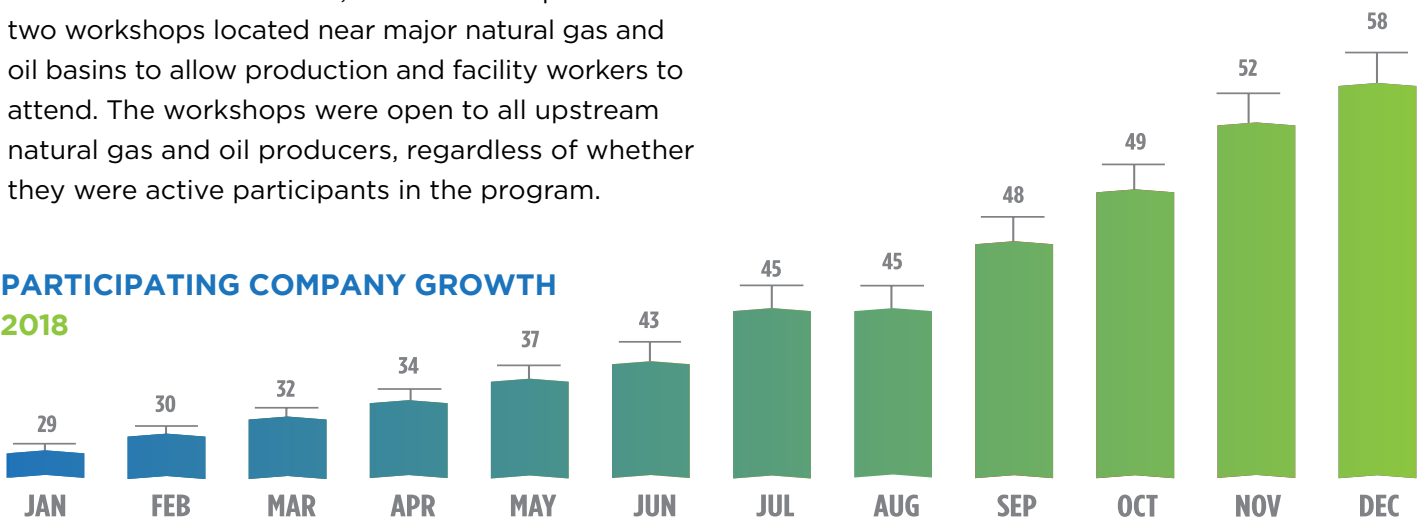
Participants in the program are committed to continually learning about the latest innovations and best practices that can further reduce their company's environmental footprint while safely and responsibly growing energy production.

The Partnership's workshops are one of the primary ways we connect experts with operators so that our participants learn more about opportunities to reduce emissions. In 2018, The Partnership hosted two workshops located near major natural gas and oil basins to allow production and facility workers to attend. The workshops were open to all upstream natural gas and oil producers, regardless of whether they were active participants in the program.

Collaborating To Improve Performance

The Partnership works to bring together members of the U.S. natural gas and oil industry—as well as academics, researchers and regulators—to collaborate on ways to improve environmental performance while responsibly developing our nation's natural gas and oil resources. Through The Partnership, we can share strategies, information and technologies that have been most effective in reducing emissions.

PARTICIPATING COMPANY GROWTH 2018



ENVIRONMENTAL RESPONSIBILITY IS EVERYBODY'S BUSINESS.

IT'S THE POWER OF PARTNERS LEADING THE WAY.

OUR MISSION

To continuously improve the industry's environmental performance by taking action, learning about best practices and technologies, and fostering collaboration in order to responsibly develop our nation's essential oil and natural gas resources.

Logos included: AERA, ALTA, AMERICAN PETROLEUM PARTNERS, Anadarko, Antero Resources, Apache, ASCENT RESOURCES, BHP, bp, Cabot Oil & Gas Corporation, CALIFORNIA RESOURCES CORPORATION, CALLON PETROLEUM, CHESAPEAKE ENERGY, Chevron, CIMAREX, ConocoPhillips, Continental RESOURCES, CROWNQUEST, Denbury, devon, encana, eog resources, EQT (Where energy meets innovation.), equinor, equitrans Midstream, EXTRACTION Oil & Gas, ExxonMobil, FLYWHEEL ENERGY, Gulfport ENERGY, HighPoint RESOURCES, Hunt OIL COMPANY, MarathonOil Corporation., MURPHY EXPLORATION & PRODUCTION CO., OXY, Occidental, PDC ENERGY, PIONEER NATURAL RESOURCES, QEP ENERGY, RANGE RESOURCES, RED BLUFF RESOURCES, REPSOL, Riviera Resources, Inc., SABLE PERMIAN RESOURCES, SENECA RESOURCES A NATIONAL FUEL GAS COMPANY, Sequitur ENERGY RESOURCES LLC, Shell, SM ENERGY, SWN Southwestern Energy, SURGE Energy, TOTAL, TRINITY OPERATING, WARWICK GROUP, Western Gas Partners, LP, WHITING, WPXENERGY, XTO ENERGY.