COGA FACT SHEET ▶▶▶ Air Quality Advancements

Protecting the air we breathe is one of Colorado's oil and natural gas industry's highest priorities. This commitment to preserving the state's air quality has resulted in methane emissions declining by 45% between 2011 and 2017, even as production has quadrupled.[1] In fact, the Regional Air Quality Council (RAQC) and the Colorado Department of Health and Environment (CDPHE) found that "new regulations and advancements in technology" have resulted in significantly reducing emissions.[2]

Colorado has led the nation in creating some of the most stringent air regulations in the U.S. In 2014, the state was the first to:

- Regulate methane emissions from oil and natural gas production, estimated to reduce more than 60,000 tons of methane emissions per year.
- Implement the most comprehensive leak detection and repair program for oil and natural gas facilities in the country.
- Expand control and inspection requirements for storage tanks to ensure tank emissions are captured and routed to the required control devices.[3]

Examples of Reducing Emissions Sources

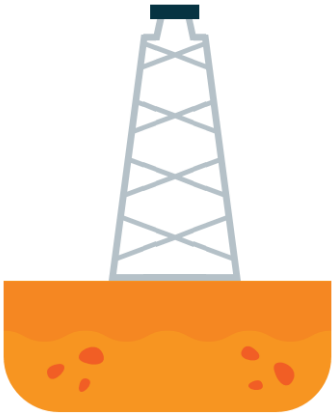
- Use of electric-powered drilling rigs instead of diesel-powered rigs to eliminate source emissions.
- Electric power used to run production facilities throughout the life of the well where feasible.
- Pipelines instead of trucks to transport oil and water, reducing site emissions and eliminating on average 40,000 truck trips and millions of truck miles per pad over 30 years.
- Use of closed-loop systems that are airtight and designed to reduce emissions.
- Removal and reclamation of thousands of legacy wells and facilities, removing older technology and emission sources.

Inspection & Monitoring Programs

- Regular inspections and recordkeeping throughout the life of the well.
- Consistently performing Leak Detection and Repair (LDAR) inspections using infrared cameras that detect emissions invisible to the human eye. Since 2014, when Colorado began LDAR monitoring, the industry has carried out nearly 1.5 million of these inspections across the state.[4]

Engineering Improvement Examples

- Use of low bleed pneumatic controllers (this releases significantly less methane into the air).
- Internal Floating Roof (IFR) tanks for control and storage of pressurized oil at gathering facilities (this provides minimum vapor loss into the environment).
- Vapor capture technology applied at some pad facilities.
- Closed-loop designs that minimize potential emission sources.

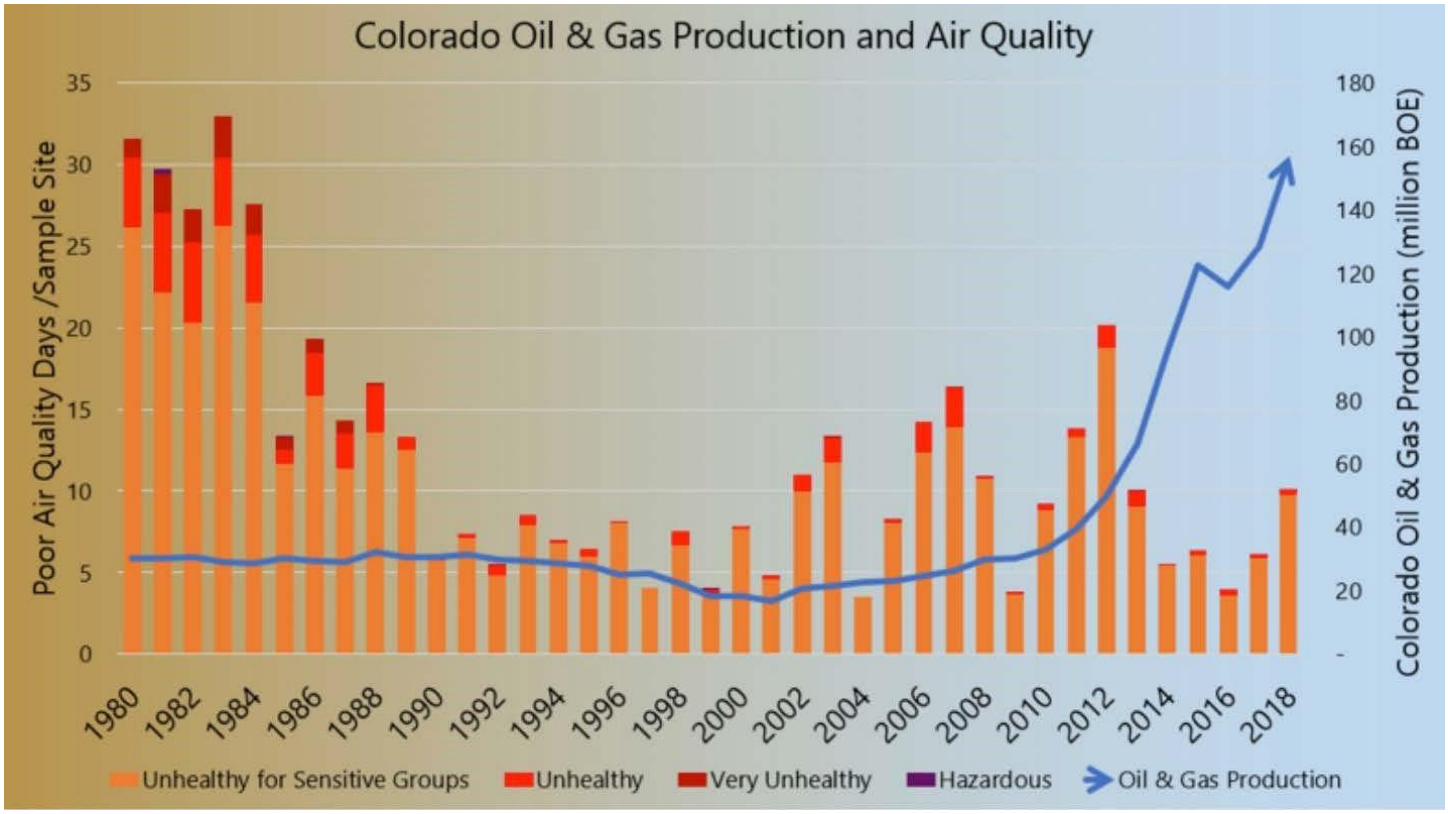


Updated: 3.4.2019

COGA FACT SHEET ▶▶▶ Air Quality Advancements

Improving Air Quality While Production Soars

Technical innovation and strict regulations resulted in Colorado experiencing fewer poor air quality days in 2018 than at any other time in the past 40 years – all while oil and natural gas production in the state increased by a magnitude of 10.[5]



Additional Resources & Information

[1] CDPHE: https://www.colorado.gov/airquality/inv_maps.aspx
[2] CDPHE/RAQC: https://raqc.egnyte.com/dl/Kk5jSAclAm/TSD_2011-2017_Oil%26GasEI.pdf
[3] CDPHE: Air Quality Control Commission, Reg. 7
[4] CDPHE: https://www.colorado.gov/pacific/cdphe/air/oil-and-gas-compliance, accessed *January 29, 2019*
[5] US Environmental Protection Agency. Air Quality System Data Mart: http://www.epa.gov/ttn/airs/aqsdatamart
[6] Colorado Oil and Gas Conservation Commission: http://cogcc.state.co.us/data.html#/cogis

For More Oil & Natural Gas Industry Informational Fact Sheets:
www.coga.org/energy-education/factsheet

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