

# IMPROVED AIR QUALITY VIA THE OIL AND NATURAL GAS INDUSTRY



As a clean-burning source of energy, natural gas is improving the health of communities and environments across the U.S. by improving air quality and decreasing pollution levels. The oil and natural gas industry is mindful of the value of improving air quality, and the expanding role that natural gas has provided in maintaining a national trend of emissions reduction.

## BACKGROUND:

Combustion of natural gas produces much smaller amounts of the potentially harmful pollutants found in some fossil fuels, such as mercury, particulate matter, nitrogen oxides (precursors of smog), and sulfur dioxide. The Environmental Protection Agency (EPA) has indicated that these various pollutants may have an adverse impact on the heart and lungs, aggravating bronchitis, emphysema, asthma, and other lung conditions, and potentially contributing to heart disease. Impacts from high emissions of some of these pollutants have also been attributed to damaging vegetation.

Beyond the exploration and production (E&P) sector the U.S. refining sector's commitment to strong environmental performance also plays an important role in keeping air clean. The refining sector produces the fuels that energize our transportation sector while innovating and developing cleaner fuel options. Just as our cars have modernized, so have our fuels and the refineries that produce them.

## FAST FACTS:

- » An Independent System Operator New England study found that regional emissions dropped 54 percent for nitrogen oxide, 96 percent for sulfur dioxide and 37 percent for carbon dioxide between 2007 and 2016. <sup>1</sup>
- » The EPA reports that total emissions of the six criteria air pollutants in the United States have been declining since 1970<sup>2</sup> and ozone levels have decreased by 22 percent since 1990. <sup>3</sup>
- » Also, CO<sub>2</sub> emissions from power generation have fallen nearly 25 percent since 2000 and are at their lowest levels in 30 years. <sup>4</sup>
- » By 2030, CO<sub>2</sub> emissions from power generation are expected to drop by as much as 28 percent from 2005 levels. <sup>5</sup>
- » The combination of cleaner gasoline and diesel fuels, modernized equipment and facilities, and more fuel-efficient vehicles has helped reduce U.S. air pollutants by 73 percent between 1970 and 2017. <sup>6</sup>

## REFERENCES:

1. [http://www.iso-ne.com/static-assets/documents/2018/01/2016\\_emissions\\_report.pdf](http://www.iso-ne.com/static-assets/documents/2018/01/2016_emissions_report.pdf)
2. "Our Nation's Air," EPA. [https://gispub.epa.gov/air/trendsreport/2018/#growth\\_w\\_cleaner\\_air](https://gispub.epa.gov/air/trendsreport/2018/#growth_w_cleaner_air)
3. "Ozone Trends," EPA. [www.epa.gov/air-trends/ozone-trends](http://www.epa.gov/air-trends/ozone-trends)
4. [Monthly Energy Review](#), EIA.
5. "Annual Energy Outlook 2018," EIA. [www.eia.gov/outlooks/aeo](http://www.eia.gov/outlooks/aeo)
6. "Our Nations' Air," EPA. [https://gispub.epa.gov/air/trendsreport/2018/#growth\\_w\\_cleaner\\_air](https://gispub.epa.gov/air/trendsreport/2018/#growth_w_cleaner_air)

