

REDUCED EMISSIONS OF GREENHOUSE GASES



Since 2000, ozone concentrations in the United States have dropped 17 percent while carbon dioxide (CO₂) emissions from power generation have fallen nearly 25 percent, and are at their lowest levels in 30 years. Much of this shift is thanks to the increased use of natural gas, as well as investment in new technologies by the oil and natural gas industry.

BACKGROUND:

The oil and natural gas industry is mindful of the value of improving air quality, and the expanding role of this resource has already provided impressive results. Greenhouse gas emissions attributable to the natural gas sector can stem from two distinct sets of operations – upstream, which includes exploration, production and distribution, and downstream, where its utilized as fuel or as feedstock for other manufacturing purposes.

Upstream, the industry has adopted voluntary practices to reduce maintenance-related releases of the greenhouse gas methane by installing improved controllers and pumps, and expanding monitoring, leak inspection and data collection programs. They also work with universities and nongovernmental organizations to monitor methane emissions and find ways to decrease them, in addition to investing \$108.2 billion on zero- and low-carbon technologies between 2000 and 2016. ¹

The increased choice of natural gas for power generation, transportation and other uses has yielded notable reductions in emissions downstream. Combustion of natural gas produces much smaller amounts of the potentially harmful pollutants found in other fossil fuels. Overall, the fuel-use changes in the power sector have accounted for 60 percent of CO₂ reductions from 2005 to 2017. ²

Natural gas is an important resource for all sectors of the U.S. economy due to its versatility, efficiency and positive impact on greenhouse gas emissions when used by diverse sectors. With the increased use of mitigation measures by the industry and of natural gas as a fuel source, the current trend of lower greenhouse gas emissions should continue.

FAST FACTS:

- » Ozone concentrations in the United States have dropped 22 percent since 1970.
- » CO₂ emissions from power generation have fallen 25 percent since 2000 and are at their lowest levels in 30 years. ³
- » By 2030, CO₂ emissions from power generation are expected to drop by as much as 28 percent from 2005 levels. ⁴

REFERENCES:

1. [“Key Investments in Greenhouse Gas Mitigation Technologies From 2000 Through 2016 by Oil and Gas Companies, Other Industry and the Federal Government”](#), April 2018.
2. [Monthly Energy Review](#), EIA.
3. [Monthly Energy Review](#), EIA.
4. [EIA, Annual Energy Outlook 2018](#)

