

REDUCING METHANE EMISSIONS IN NATURAL GAS SYSTEMS

Natural gas systems are a leading contributor to CH₄ or methane emissions in the U.S., along with agriculture, landfills and coal mining. But methane emissions from natural gas have been trending lower overall in recent decades. CH₄ emissions from natural gas systems declined by 15.7% from 1990 to 2020, according to the U.S. EPA's 2020 Greenhouse Gas Inventory, released in April 2022.

EPA notes that the decrease in CH₄ emissions is largely due to decreases in emissions from distribution, transmission, and storage. The decrease in distribution emissions is due to decreased emissions from pipelines and distribution station leaks, and the decrease in transmission and storage emissions is largely due to reduced compressor station emissions (including emissions from compressors and equipment leaks). An increased use of plastic piping, which has lower emissions than other pipe materials, has reduced both CH₄ and CO₂ emissions from this stage, as have station upgrades at metering and regulating (M&R) stations. Distribution system CH₄ emissions in 2020 were 70 percent lower than 1990 levels. [EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020, pages ES-13 and 3-88-91, April 2022]

*Individual states continue to record progress as well in reducing methane emissions. For example, **Connecticut** reports that emissions from leakage from natural gas distribution and transmission systems accounted for 0.6% of all statewide consumption-based GHG emissions (source: Connecticut 2018 GHG Inventory, released Sept. 2021). Natural gas system leakage in Connecticut has declined by two-thirds since 1990.*

Reducing methane emissions further through infrastructure replacement, new technology applications, and best practices at all stages of the production and delivery process, is an industry priority.

