

Methane is causing **25% of man-made global warming.**

Oil & gas is the largest industrial source of U.S. methane emissions.

Methane is the primary constituent of natural gas: emissions are a public health, climate and waste problem.

Methane from O&G production sources is emitted with **VOCs, a building block of ozone pollution.**



Methane is invisible to the naked eye.

Emissions from smaller, low-producing wells

- A recent peer-reviewed study (*Omara et al*) found that smaller, low-producing wells are major emission sources.
- These wells **produce 6%** of gas but create **50%** of well-site emissions.
- **75%** of these wells are owned by large companies with resources to fix leaks.



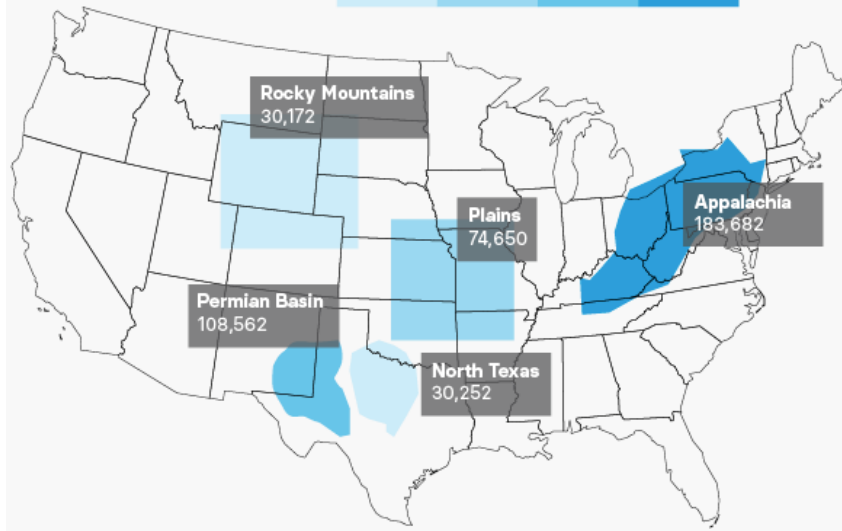
Regular inspections at small well sites can help identify leaky equipment

Emissions from smaller, low-producing wells

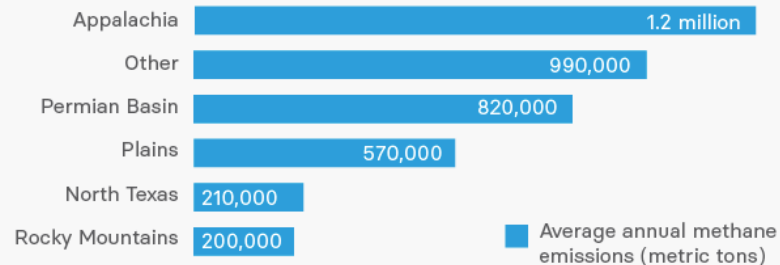
Where it's worst

Regions with highest percent of low-producing wells

0-10% 10-20% 20-30% >30%

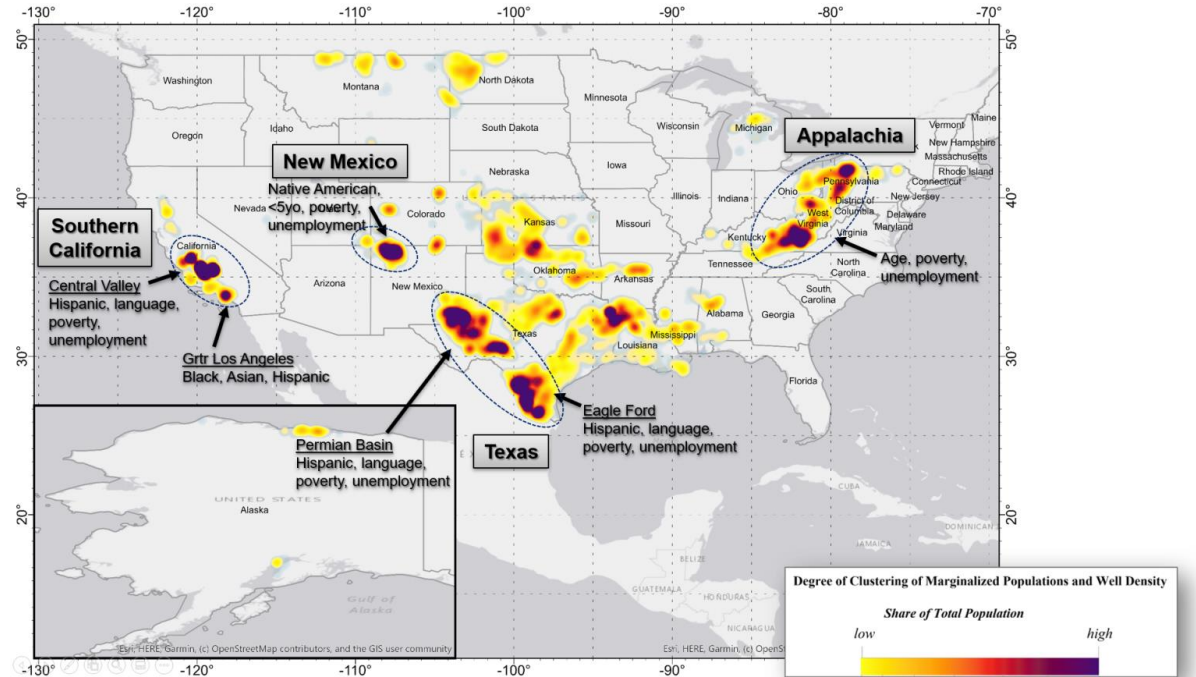


Low-producing well pollution by region



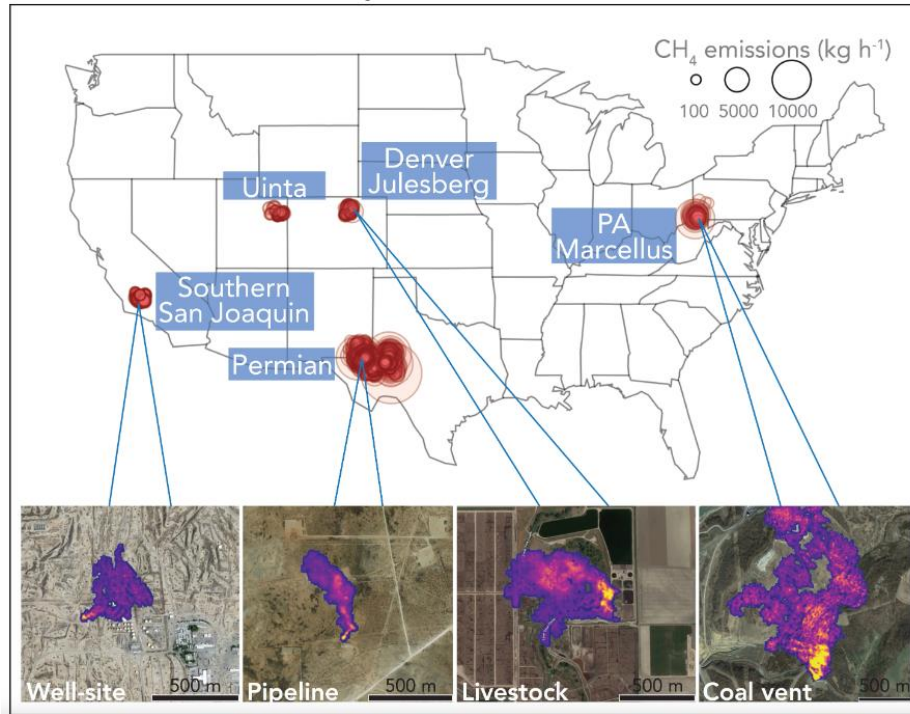
Pollution disproportionately impacts frontline communities

- Recent study (*Proville et al*) finds that 18 million people live within ½ mile of an oil/gas well
- Communities of color, older Americans, children, and people living under the federal poverty line—often live near wells in greater proportions than the other groups that make up the rest of their local county.



Research reveals severity of super emitters, benefits of regulations

Basins surveyed between 2019-2021



- JPL study published in Proceedings of the National Academy of Sciences, Sept. 2022
- Super emitters responsible for 40% of emissions across 5 basins.
- “This study shows that states that have established leading methane rules like **Colorado** and **California** appear to have a lower frequency of super-emitters, underlining the importance of strong nationwide rules from EPA.”
– David Lyon, EDF Senior Scientist

Opportunity for improvement

Cost Effective Solutions

- International Energy Agency estimates **45%** of methane emissions can be avoided at **zero net cost**

Federal Action

- EPA new and existing source standards supplemental expected **Fall 2022**. State implementation once final



Oil and gas states continue to improve regulations

- **CO and NM:** Bans on routine venting and flaring
- **CO and NM:** Frequent leak detection and repair required at new and existing well sites + smaller, lower producing wells.



**Routine flaring no longer
acceptable in Colorado and
New Mexico**

The Oil and Gas Methane Partnership offers a pathway to credible emissions data



Comprehensive, **measurement-based** reporting framework



Disclosure of all material emissions, including from **non-operated assets**



Rigorous **science-based protocol** with a jointly developed technical roadmap



Global and standardized in nature w. 80+ companies across 60+ countries

