

# THE CLIMATE CRISIS CANNOT BE SOLVED IF WE CONTINUE TO RELY ON GAS.

We must move beyond gas for electricity generation, heating water, heating homes and businesses, and powering stoves and other appliances.

Decreasing our reliance on coal continues to be a serious climate priority, but we must not replace one problem with another. Flaring and gas leaks at the well, leaking pipelines delivering gas to our homes and businesses, and burning gas to generate electricity all lead to greenhouse gas emissions that rival burning coal.

Replacing coal with gas is like replacing cigarettes with a nicotine vape.



## METHANE



Gas is primarily composed of methane, an incredibly potent greenhouse gas. Gas-fired power plants could create as much, if not more, climate changing pollution over the short- and long-term than coal-fired power according to the Congressional Research Service.

## LEAKY FROM END TO END



Pumping gas from deep beneath the earth's surface to make electricity, power appliances, or heat homes and businesses is dangerous and inefficient from the beginning of the process until the end.

Increased fracking – a technique to extract more oil and gas from the earth – is thought to be largely responsible for the steep rise in methane emissions since 2006 while also contaminating groundwater and releasing toxic air pollution.

After gas is brought to the earth's surface, it moves through pipelines and compressor stations that pressurize the gas so it can flow through pipelines for long distances – an antiquated system that is known for leaking significant amounts of gas and other pollution into the air.





Gas travels through increasingly smaller pipelines to reach homes, businesses, and power plants generating electricity.

This enormous gas plumbing system is so leaky that it results in an alarming number of explosions each year. There were more than 6,000 pipeline leaks detected over the past decade, resulting in more than 100 deaths, thousands of injuries, and over \$5 billion in identified costs. If you include the cost of explosions and leaks from gas use in the home, the numbers increase dramatically.

Some experts estimate that gas extraction and transport are so wasteful, they leak as much methane as the amount that is burned for fuel. That's terrible news for the climate.

"ABOUT 40% OF NATURAL GAS NOW VENTED OR FLARED FROM ONSHORE FEDERAL LEASES COULD BE ECONOMICALLY CAPTURED WITH CURRENTLY AVAILABLE TECHNOLOGIES." 2010 GAO REPORT

## DANGER IN THE HOME



Gas stoves emit particulate pollution along with nitrogen dioxide, carbon monoxide, and carbon dioxide.

Even when they're not being used, gas stoves have been shown emit methane. The amount of methane the researchers found leaking out of stoves alone was 15% higher than the EPA's estimate for all residential emissions in 2019.

This can lead to an increase in asthma and cardiovascular diseases, according to the Rocky Mountain Institute.

# WHAT CAN WE DO ABOUT THE GAS PROBLEM?

#### IMMEDIATELY:

#### STOP BUILDING NEW GAS PLANTS TO GENERATE ELECTRICITY.

Prevent NorthWestern Energy, the state's largest electric utility, from building expensive new gas plants.

#### PRIORITIZE ENERGY EFFICIENCY AND CONSERVATION.

Make homes and businesses more energy efficient, and engage in energy conservation measures such as turning off and unplugging equipment when it's not in use.

### ELIMINATE INCENTIVES FOR GAS AND OIL DRILLING ON PUBLIC LANDS.

Stop allowing federal and state governments to essentially give away public lands for oil and gas development. Non-competitive and low cost leases harm the climate, public lands, water, and wildlife.

#### REDUCE WASTE AT WELLS.

Require gas developers to use cost-effective methods to collect and utilize leaking methane at the well and prohibit flaring (the wasteful burning of methane emissions at the well site).

ELIMINATE LEAKS AT EXISTING PIPELINES AND COMPRESSOR STATIONS.

#### **DURING THE NEXT TEN YEARS:**

# ELECTRIFY HOMES AND BUSINESSES AND POWER THEM WITH CLEAN ENERGY & STORAGE.

Buildings are responsible for 13% of total U.S. climatechanging emissions. Swap out gas appliances for electric appliances.

PHASE OUT EXISTING GAS PLANTS AND REPLACE THEM WITH CLEAN ENERGY & STORAGE.



### ADDITIONAL RESOURCES

Congressional Research Service, Life-Cycle Greenhouse Gas Assessment of Coal and Natural Gas in the Power Sector. Updated June 26, 2015.

https://crsreports.congress.gov/product/pdf/R/R44090

Ideas and perspectives: is shale gas a major driver of recent increase in global atmospheric methane? <a href="https://bg.copernicus.org/articles/16/3033/2019/">https://bg.copernicus.org/articles/16/3033/2019/</a>

Pipeline and Hazardous Materials Safety Administration. <a href="https://portal.phmsa.dot.gov/analytics/saw.dll?">https://portal.phmsa.dot.gov/analytics/saw.dll?</a>
<a href="mailto:Portalpages&PortalPath=%2Fshared%2FPDM%20Public%20">Portalpages&PortalPath=%2Fshared%2FPDM%20Public%20</a>
<a href="mailto:Website%2F\_portal%2FSC%20Incident%20Trend&Page=All%20Reported">Website%2F\_portal%2FSC%20Incident%20Trend&Page=All%20Reported</a>

Natural Gas and Propane Fires, Explosions and Leaks Estimate and Incident Descriptions. October 2018. <a href="https://www.nfpa.org/-/media/Files/News-and-">https://www.nfpa.org/-/media/Files/News-and-</a>
Research/Fire-statistics-and-reports/Hazardousmaterials/osNaturalGasPropaneFires.ashx#:~:text=Explosion
s%20and%20Leaks-,Estimates%20and%20Incident%20Des
criptions,of%2040%20deaths%20per%20year

Gas Stoves are Making People Sicker and Exposing Children to a Higher Risk for Asthma, Study Claims <a href="https://www.sciencetimes.com/articles/25590/20200506/gas-stoves-making-people-sicker-exposing-children-higher-risk-asthma.htm">https://www.sciencetimes.com/articles/25590/20200506/gas-stoves-making-people-sicker-exposing-children-higher-risk-asthma.htm</a>

FACT SHEET ON METHANE AND WASTE PREVENTION RULE <a href="https://www.doi.gov/sites/doi.gov/files/uploads/methane\_w">https://www.doi.gov/sites/doi.gov/files/uploads/methane\_w</a> <a href="mailto:aste-prevention-rule-factsheet-final.pdf">aste-prevention-rule-factsheet-final.pdf</a>

Methane and NOx Emissions from Natural Gas Stoves, Cooktops, and Ovens in Residential Homes. https://pubs.acs.org/doi/10.1021/acs.est.1c04707

