



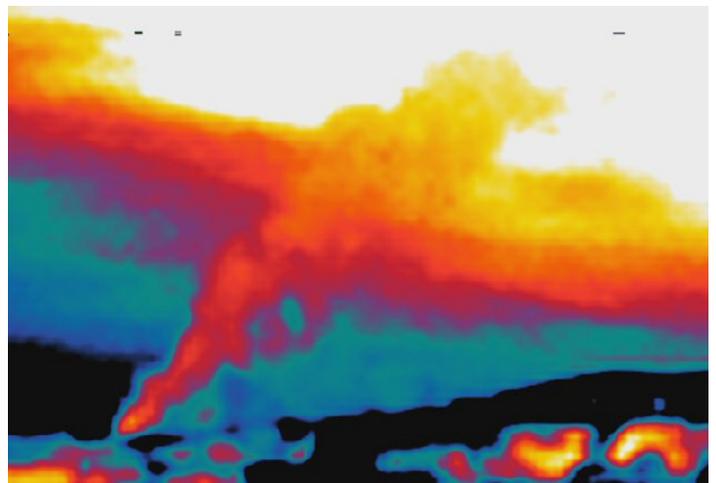
# FRACKED GAS: NOTHING “NATURAL” ABOUT IT

Coal, oil, and fracked gas are the primary sources of human-caused climate change, leading to stronger hurricanes, more severe droughts, public health crises, and a wide range of other global dangers. Fracked gas is already a major threat to our climate, communities, and economy, and with over 9,000 miles of planned fracked gas pipelines in the U.S., the threat is only growing. The introduction of fracking has transformed the industry and made fracked gas into one of the largest threats to our climate. Fracking has increased dramatically in recent years. About two-thirds of all gas production in the United States now comes from fracked wells, compared to less than 10 percent in 2000.<sup>1</sup>

There’s nothing “natural” about fracked gas. From the cocktail of toxic chemicals injected into the earth, to the greenhouse gases produced by burning it, fracked gas is dirty every step of the way, from extraction to consumption.

## **THE MYTH OF GROWING GAS DEMAND**

Polluting corporations in the gas industry are now trying to manufacture demand for their increases in production. In the U.S. in 2017, 34 percent of gas was used for electric generation; 28 percent was used for heating water, spaces, and other uses in buildings;<sup>2</sup> and 29 percent was used for industrial purposes.<sup>3</sup> The remainder of domestic use is in the energy intensive process of gas extraction and distribution



*Infrared photo of a gas leak in California. Photo: Environmental Defense Fund*

and as vehicle fuel. U.S. producers also exported a significant amount of gas equal to 11 percent of total U.S. consumption.<sup>4</sup> Because overall demand for electricity is declining, the gas industry has turned to exports and the petrochemical industry to get rid of its glut of fracked gas.<sup>5</sup> Liquefied natural gas (LNG) exports have risen more than 1,000 percent over the past 10 years — a staggering amount — and there are 16 new LNG export terminals proposed and 9 more that have been approved. If all built, these projects would increase U.S. LNG export capacity tenfold, driving even more dirty fracked gas production.<sup>6,7</sup>

**The U.S. does not need this gas, and the increases in production and associated infrastructure exacerbate climate change and drive up energy costs, which are passed on to ratepayers.<sup>8</sup>**

### **THE TRUE CLIMATE DAMAGE OF FRACKED GAS**

The production, processing, storage, transmission, and distribution of fracked gas leaks immense amounts of a dangerous greenhouse gas into our atmosphere. Unburned fracked gas consists primarily of methane, and while carbon dioxide remains in the atmosphere for longer than methane, methane has a much stronger climate warming effect. When its impact is averaged over a 20-year period, methane leaked directly into the atmosphere is 87 times more powerful at trapping heat than carbon dioxide.<sup>9</sup>



*The proposed Atlantic Coast Pipeline would generate an estimated 68 million metric tons (MMT) of carbon dioxide equivalent every year*

Many researchers have calculated the national average gas leakage rate with a central estimate of about 3 percent of total production.<sup>10,11,12,13,14,15,16</sup> The gas industry has callously resisted measuring or reducing this harmful leakage. In fact, a study of 65 major oil and gas companies found that not one had methane emissions reduction targets, and only 14 percent even reported their methane emissions rate.<sup>17</sup>

**When accounting for methane leaks, fracked gas has climate impacts that rival those of coal. Including the upstream impacts of gas, (meaning the methane emissions during production, processing, storage, and transmission), rather than just the emissions when it is burned doubles the climate impact of gas.** For example, the proposed Atlantic Coast Pipeline would generate an estimated 68 million metric tons (MMT) of carbon dioxide equivalent every year it is in service as it spurs the extraction of more fracked gas.<sup>18</sup> This is equivalent to the annual emissions from about 17 coal plants each year.<sup>19</sup>

A study cited by the United Nations predicts that without an immediate reduction in methane and other greenhouse gas emissions we are in grave jeopardy of reaching a 1.5 degree (Celsius) warming by the year 2030 and continuing to a 2 degree increase soon after.<sup>20</sup> These are considered the thresholds above which the worst effects of climate change are likely to occur. With this warming trend, we will not meet the goals set under the Paris Climate Agreement, the landmark climate plan signed by every country except the United States. The Paris Agreement has been upheld by thousands of U.S. cities, states, and businesses despite the Trump Administration's stated intention to abandon the agreement in 2020.<sup>21</sup>

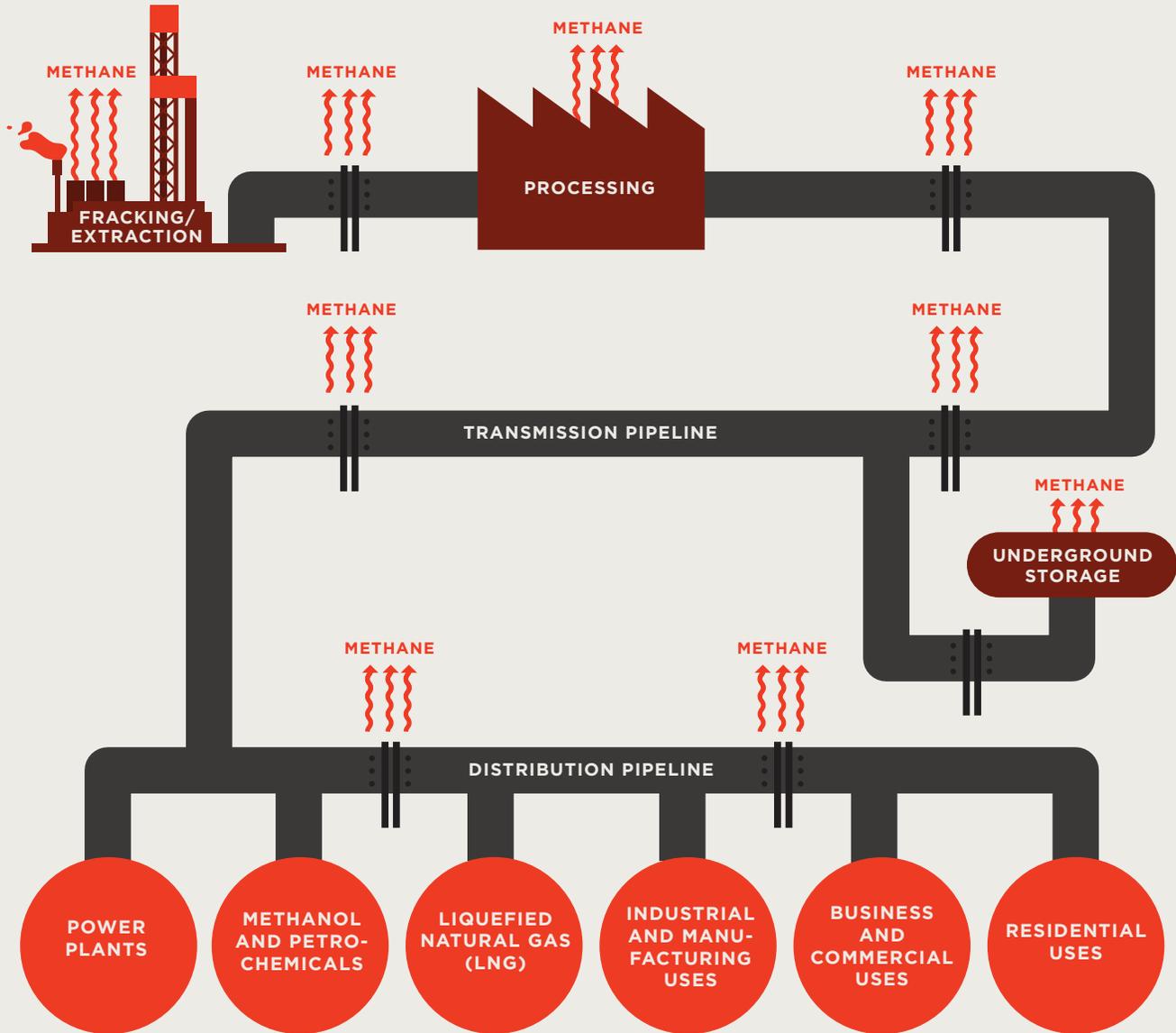
To reach our climate goals, we must stop the expansion of fracked gas pipelines, plants, LNG facilities, and other infrastructure.

### **THE FUTURE IS NOW: THE FALLACY OF A FRACKED GAS TRANSITION**

As coal plants are retired across the United States, our decisions for energy replacement options will affect our climate, our health, and our security for generations to come. The fossil fuel industry has long touted gas — while ignoring the climate and health threats that come with it — as necessary for

# FRACKED GAS CYCLE

*Methane Leaks from Beginning to End*



*Energy: Understanding our Natural Gas Supply Chain - American Petroleum Institute (Slide 4)*  
*Life Cycle Greenhouse Gas Emissions: Natural Gas and Power Production - EIA, US Department of Energy: NETL (Slide 6)*

the transition to a carbon-free energy mix while clean energy technology develops. **The truth is that our clean energy future is here now, creating jobs and cutting pollution through solar, wind, and energy efficiency projects.** The gas pipelines and plants we build now will burden ratepayers and future generations

with the financial and public health costs of that infrastructure and delay development of increasingly competitive clean energy. We must more rapidly reduce our reliance on fossil fuels and replace them with truly clean alternatives, such as wind, solar, and energy efficiency, not build a new fossil fuel skeleton for our power grid at a time when clean energy is cheap and plentiful.

## THE DANGERS OF FRACKED GAS BEYOND CLIMATE

Fracked gas exacerbating climate change is just part of a larger problem. People living on the front lines of the fracked gas infrastructure explosion face a wide range of threats, including, but not limited to:

- Groundwater and drinking water contaminated by toxic fracking chemicals
- Explosions due to leaking pipelines and storage facilities
- Breathing problems, premature births, and cancer linked to fracked gas development
- Earthquakes from fracking
- Destruction of ecosystems, forests, and sensitive habitats
- Tourism economies crippled by the permanent degradation of pristine waterways, forests, and vistas
- The cost of abandoned gas infrastructure as it fails to compete with more affordable clean energy sources, leaving ratepayers on the hook
- Higher risks for low-income people and communities of color as gas projects are disproportionately sited in their neighborhoods

## ENDNOTES

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