

C

COMPLIMENTS RENEWABLES

Natural Gas is an essential partner to the growing amount of renewable electric power generation, helping to further reduce carbon emissions. Unlike renewables, Natural Gas has significant storage capacity that can handle peak demands. U.S. combined battery storage is equivalent to just one hour of operation of a nuclear power plant. In August of 2020, the state of California was plagued by rolling blackouts as a heatwave instigated electricity demand that pushed the grid to the limits and exceeded California's power capacity. Natural Gas stands ready to partner with renewables to fill the gap when demand outpaces storage.

H

HEIGHTENS ENERGY INDEPENDENCE

Last year (2019), the largest percentage (38.4%) of the electricity in the U.S. was generated by Natural Gas (per EIA-U.S. Energy Information Association). It is the primary source of electricity in 19 states. As Natural Gas production has increased, energy imports have disappeared, and the U.S. as of 2017 is, and continues to be, a net exporter of Natural Gas. America's exported natural gas helps our planet move away from high carbon producing fuels such as coal, oil, trash, and wood.

A

ABUNDANT AND AFFORDABLE

Based upon current geological surveys, the estimated future supply of domestic natural gas is enough to meet America's energy needs for more than 110 years at low and stable prices. In 1980 Natural Gas cost \$1.80/dth. Today, 40 years later, it costs on average \$1.86/dth. Homes using natural gas average \$879 in savings and since 2009 U.S. businesses saved \$121 billion with natural gas.

M

MINIMIZES CARBON EMISSIONS

Natural Gas is a vital part of the solution in the reduction of carbon emissions, not the problem. Pipelines are maintained so well that methane emissions declined 75% between 2004-2015. According to the U.S. Energy Information Administration, the US has achieved 861 million metric tons of CO2 reductions since 2005, while natural gas consumption has increased 25%. Methane (consisting primarily of CH4 hydrocarbon mixture) when combusted/oxidized generates carbon dioxide at a rate 50-60% less than coal and oil. America has experienced a 53% average reduction in greenhouse gas emissions when natural gas generates electricity instead of higher carbon fuels.

P

PROVIDES COMFORT AND RELIABILITY

More than half of our population (179 million Americans) use natural gas at work and home every day. Natural Gas is as easy to use as flipping a switch or turning a dial, putting heat and hot water at your fingertips. In addition, the Natural Gas industry has shown an exceedingly high level of reliability during storms and other significant natural disasters when compared to other forms of energy delivery (namely electric power distribution). Weather patterns show wind and solar is only available to produce energy about 25% of the time. Natural gas availability is always 24/7/365.

I

INNOVATIVE

Natural Gas utilities spend \$26 billion annually to enhance the integrity and safety of natural gas infrastructure resulting in the reduction of methane leaks and CO2 emissions with more fuel-efficient combustion technology. In the future, our pipeline network may be transporting a cleaner mixture of natural gas, hydrogen, and gas from biomass/landfills at near 0% leakage rates.

O

OPERATIONAL EXCELLENCE WITH PUBLIC SAFETY BEING PRIORITY #1

The Pipeline and Hazardous Materials Safety Administration's (PHMSA) data shows that 3 million miles of underground pipelines are the safest method of transporting energy (compared to 3.5 million miles of paved roads in the U.S.). PHMSA reports that the 10 year average for natural gas distribution systems lead to 26 incidences and 8 fatalities per year compared to over 6 million traffic and car accidents every year resulting in 3 million people injured and 40,000 people killed on the 3.5 million miles of paved roads in the U.S. The National Transportation Safety Board (NTSB) says that pipeline accidents make up less than .01% of all transportation accidents in the U.S. Pipelines are virtually monitored 24/7, 365 days per year by trained operators.

N

NATURALLY EFFICIENT

From the well to the burner tip, Natural Gas can achieve efficiency ratings over 90%. Compared to electric distribution, roughly 60% of electricity's energy is lost in the conversion and delivery from generation to the consumer equating to an average efficiency rate of 30% with coal and oil and an average efficiency rate of 50% with natural gas.



NATURAL GAS ADVOCACY

As more public attention is placed upon the use of natural gas and its perceived impact on the environment, it is particularly important to increase your knowledge and awareness of our industry. Natural Gas has a bright future and it is imperative that we understand how its utilization is part of the solution and not the problem.

ELEVATOR SPEECH

We encourage you to craft your own by utilizing the following as an example:

“Good day and thank you for your time. My name is Dan Pajak with UPSCO, Inc. I have spent my entire 33-year career in the natural gas transmission and distribution industry, and I am proud to be a part of a system that delivers life sustaining and life enhancing energy. I wake up every day grateful for the electricity, warm water, cooking fuel, and warmth made possible by clean burning natural gas. Natural Gas enhances our daily lives as a vital component in the production of raw materials and consumer goods. Without it, the cell phone you have in your hand, the car you drive and so many other products we take for granted would not exist in their current forms. It may surprise you to know that according to the U.S. Energy Information Administration; the US reduced CO2 emissions by 861 million metric tons since 2005, while increasing the consumption of natural gas by 25%. This is primarily a result of converting coal and oil electricity generation to natural gas. As one of the safest, most versatile, domestically abundant, reliable, efficient, and cost-effective sources of energy; natural gas is uniquely qualified to meet the growing demands for renewable fuel sources and will support the advancement of sustainable energy. I welcome the opportunity to have an open and fact-based conversation about how natural gas is a critical part of the solution to carbon emissions and to making renewables work successfully.”

High Carbon Fuels

Natural Gas

53%
Fewer Carbon Emissions
Compared to High Carbon Fuels

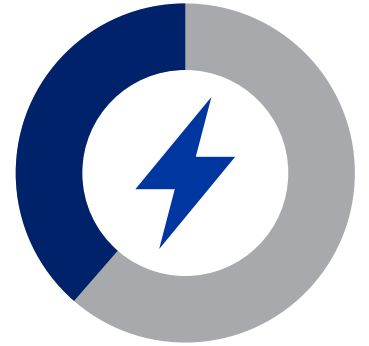
U.S. Energy Information Administration

73%
Reduction in Natural Gas Carbon Emissions

1990 *American Gas Association* Today

38.4%
U.S. Electricity Generated by Natural Gas

U.S. Energy Information Administration



180,000,000 People
Use Natural Gas Daily

U.S. Energy Information Administration

1 Hour

U.S. combined battery storage is equivalent to just one hour of operation of a nuclear power plant

SEPA's 2019 Utility Energy Storage Market Snapshot

Efficiency Innovations

12 Million New Residential Customers

No Increase in Consumption

Over 20 Years

American Gas Association



The above data made available courtesy of the Southern Gas Association in conjunction with their Natural Gas Advocacy Program. For more information visit southerngas.org