American Conservation Coalition

Natural Gas 101



Abundant, Low Carbon, Dispatchable Clean Energy

Since 2000, no energy source has proved more useful in reducing carbon dioxide emissions than natural gas. Natural gas technology innovation has resulted in drastic emissions reductions, lower energy prices, and energy independence for the United States. Despite these benefits, natural gas faces significant opposition, with some groups calling for a ban on fracking altogether.

While no fuel source is perfect, attacks on natural gas are largely misguided. Today, the natural gas industry is continually innovating and finding ways to deliver its fuel in cleaner and safer ways. As we move towards a low-carbon energy economy, natural gas will have a significant transitionary role to play in meeting domestic and international energy demands, while also helping to reduce emissions by moving away from coal, which produces more emissions. This will buy significant time for clean energy technologies to develop and scale further.

Facts vs. Myths

- Natural gas is overwhelmingly bad for the environment. **MYTH**
- The transition from coal to natural gas has been the <u>leading cause</u> of emissions reductions in the United States. FACT
- Eliminating natural gas would immediately reduce our carbon footprint. MYTH
- American natural gas is cleaner than <u>Russian</u> natural gas. FACT

The Benefits of Natural Gas

- Natural gas has reduced our emissions.
 - The United States has had the <u>largest absolute decline</u> in emissions since 2000, according to the International Energy Agency.
 - The switch from coal to gas accounts for "the majority of the progress the US has made in reducing emissions over the past decade," says the Rhodium Group.
 - Since 2011, more than 100 coal-fired power plants have been replaced or converted to natural gas.

• Natural gas gives us energy security.

- Since 2016, the United States has been a <u>net exporter</u> of natural gas.
- In 2019, the United States achieved <u>energy independence</u> for the first time since 1957, largely due to natural gas.

Natural gas is affordable.

- The Council of Economic Advisors <u>estimates</u> that the shale revolution saves U.S. consumers \$203 billion annually in lower energy prices.
 - For a family of four this is \$2,500 per year.
 - The Council also found that the poorest 20% of Americans have been able to save an additional 7% of their annual salary due to lower energy prices.

• Natural gas is economically beneficial.

- The natural gas industry employs roughly 270,000 people in the U.S.
- Liquified natural gas (LNG) exports <u>could add</u> 452,000 jobs and \$74 billion annually to U.S.
 GDP by 2035.

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Markets vs. Mandates

- Mandates to <u>ban fracking</u> would cause economic devastation while doing little to meaningfully reduce our emissions.
 - If fracking were banned, up to 19 million jobs would be lost by 2022, and cost of living would go up significantly, and U.S. GDP would decline \$7.1 trillion.
 - The energy gap would then need to be filled by coal, thus increasing emissions.
- Overbearing government mandates in cities such as <u>San Francisco</u> (where natural gas appliances are banned) limit consumer choice, disproportionately hurt poor families, and harm the environment.
 - Often, gas appliances use around 30% less energy than electric appliances.
 - By removing the option to use natural gas, cities are raising the cost of energy disproportionately for low- and middle-income families.
- Through market forces and consumer demand, natural gas delivery is becoming cleaner.
 - Companies and industry partners have plans to eliminate natural gas flaring within the next ten years, lessening their carbon and methane intensity.
 - The natural gas industry has <u>invested</u> in efficiency programs, pipeline improvements, and renewable natural gas developments.

How to Further Harness Natural Gas

- Unlock barriers to private sector innovation.
 - Reforming regulations such as the EPA <u>New Source Review</u>, and increasing natural gas R&D funding within the U.S. Department of Energy.
- Increase LNG exports to other countries to provide clean-burning natural gas worldwide.
 - As of 2019, the United States <u>exported</u> liquified natural gas to 38 countries.
- Scale technologies such as carbon capture to make natural gas even cleaner.

In Summary

- Innovation in natural gas made America the world's largest emissions reducer.
- Natural gas has lowered energy costs and helped America reach energy independence.
- Natural gas is critical to reaching our clean energy future.