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BACKGROUNDER

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The Misguided Attacks on Natural Gas

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KEY TAKEAWAYS

Affordable, reliable energy is a key building block for human flourishing and economic prosperity.

Unfounded calls to restrict natural gas, whether at the federal or local level, would adversely impact consumers, the economy, and the environment.

Policymakers should reject demands to thwart production of an affordable, dependable, environmentally friendly energy source.

Affordable, reliable energy is a key building block for human flourishing and economic prosperity. Energy keeps us cool in the summer, warm in the winter, and powers our schools, hospitals, and office buildings. When Americans pay more on their electric bills, fewer dollars are available for health care, clothes, and food—disproportionately harming low-income families.

Through the pursuit and entrepreneurial drive of U.S. energy producers, smart extraction technologies have unleashed a historic boom in oil and natural gas supply. In 2011, the U.S. overtook Russia to be the world's largest natural gas producer,[1] generating jobs and economic opportunity across the country. Increased supplies have lowered energy bills for households and businesses, and natural gas exports have provided energy security to America's allies. Importantly, the surge in natural gas production has reduced pollution and improved the environment.

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Yet natural gas as a fuel source has been under attack because it prolongs the use of a fuel that is a source of the greenhouse-gas emissions carbon dioxide and methane. Its affordability and abundance serves as an obstacle to a completely emissions-free power sector. However, if natural gas opponents succeed in thwarting production and consumption, their policies would inflict economic and environmental damage. This *Backgrounder* discusses the broad range of benefits the energy renaissance has created—and the unintended economic and environmental consequences of restricting natural gas use.

Natural Gas: Economic, Geopolitical, and Environmental Advantages

Natural gas production has nearly doubled during the past two decades.[2] Overtaking coal in 2016 as the largest source of power generation, natural gas provided 38.4 percent of America's electricity last year.[3] The benefits of such a dramatic shift have been widespread. Although the industry has faced economic challenges before and during the COVID-19 pandemic, the shale boom has had an unmistakably positive impact in terms of generating wealth and prosperity.

Economic Gains. Increased natural gas production is acting like a tax cut through substantial savings on cheaper electric bills. The Council of Economic Advisers found that the shale boom saves about $2,500 annually for a family of four.[4] For families that own the mineral rights, they collect thousands of dollars in royalty payments every month.

Energy-intensive industries, like agriculture and manufacturing, readily welcome abundant, inexpensive natural gas because it is critical for their operations. In fact, the American Chemistry Council has directly cited shale gas as the reason they have 343 projects totaling $203 billion in new capital expenditures that are either completed, in construction, or planned.[5]

Geo-Political Gains. The economic gains expand beyond America's borders, too. Producers have turned to customers abroad, and, in a rather short time, the U.S. has become world's third-largest liquefied natural gas (LNG) exporter. For European allies, the ability to import American-produced gas is not just access to a cheaper, stable fuel source. By providing more choice, domestically produced energy has helped to loosen Russia's stranglehold on Europe's natural gas market in Europe. While the demand reductions from a mild winter in Europe and COVID-19 cut LNG exports by more than 50 percent for the first half of 2020,[6] maintaining open markets will be fundamental to domestic producers and international customers when demand picks up.

Environmental Gains. In addition to economic and geopolitical value, natural gas has environmental advantages. Since natural gas burns cleaner than other conventional fuels, its increased use in the electricity and transportation sectors has resulted in less pollution, even with pollution-control technologies in place for other sources of energy.[7] Burning natural gas produces inconsequential amounts of particulates, sulfur, and mercury.

Furthermore, natural gas is responsible for America's drop in carbon-dioxide emissions, and as production increased significantly, methane emissions from natural gas systems decreased 23.7 percent from 1990 to 2018.[8] Whether it is traditional pollutants or greenhouse-gas emissions, more natural gas is moving America in the right direction. Natural gas exports are even paying environmental dividends around the world because the LNG is cleaner than burning coal or Russian-piped gas.[9]

The Keep-It-in-the-Ground Movement

In spite of all of the benefits natural gas provides, this fuel source is under attack at seemingly all levels, from pulling it out of the ground to using gas-fired ranges. For instance, New York's decision to ban the safe, long-used extraction process of hydraulic fracturing is denying economic opportunities for energy producers—not to mention hotels, restaurants, and all of the supporting industries that surround energy development. Instead, New York is relying on imports from the same shale gas deposits in neighboring Pennsylvania.[10]

Several Members of Congress have also called for federal bans on hydraulic fracturing and prohibiting oil and gas development on federal lands. Rather than imposing an outright prohibition on development, a better approach would be to open the leasing to all interested parties so that keeping the resources in the ground could be an option for the winning bidder(s) if that is the outcome they prefer.

Problems in the northeast and around the country are compounded by an obstructionist attitude toward new energy infrastructure. When presented with the opportunity, residents in places like Pennsylvania moved away from home heating oil, a move that improves local air quality and lowers energy bills.[11] But instead of relying on permit processes that evaluate whether a project meets environmental requirements and serves a demonstrated market need, laws have been abused to delay—or outright cancel—new natural gas pipelines.

On the West Coast, matters are even worse as California is grappling with electricity blackouts during a heatwave. Families are denied access to air

conditioning and businesses operate on limited hours. Part of the problem is the state's aggressive approach to subsidizing and mandating renewable energy.[12] Otherwise dependable natural gas plants are decommissioning decades ahead of schedule.[13] Lance Hastings, President of the California Manufacturers and Technology Association, stated, "Hot weather and a cloudy day should not be able to shut down the fifth-largest economy in the world."[14]

Other cities and localities are taking the fight to the local level by proposing to restrict or ban natural gas use in new and existing homes and businesses.[15] Doing so would eliminate natural gas as an option to power buildings and eliminate gas-fired appliances that consumers prefer. If carried out to existing homes, ripping out and replacing all of these appliances could potentially cost tens of thousands of dollars per household. Adding to the price tag for families is the actual energy savings. Households that use natural gas for heating, cooking, and drying clothes save nearly $900 per year compared with families who use electric.[16]

Moreover, in many instances, gas appliances are actually the greener option. As Consumer Affairs reported last year, "Gas takes the trophy as the more eco-friendly option for any appliance. Gas dryers in particular use 30 [percent] less energy than electric ones, which will reduce your carbon footprint."[17]

Beyond the adverse consumer and environmental effects of prohibiting natural gas in homes and office buildings, broader attempts to restrict natural gas extraction and delivery would have similar deleterious impacts.

The Economic and Environmental Effects of Restricting Natural Gas

Restricting natural gas, whether at the federal or local level, would adversely impact consumers, the economy, and the environment. A recent study from the U.S. Chamber of Commerce's Global Energy Institute found that an outright ban on hydraulic fracturing would quadruple a family's energy bill, increasing the cost of living by $5,661 per person each year through 2025.[18] Low-income households, who spend a higher percentage of their budget on energy bills, would be disproportionately harmed.

Furthermore, higher energy prices and higher rates of energy poverty curb the use of air conditioning in the summer and heating in the winter, which increases weather-related mortalities.[19] Restrictions on extraction and infrastructure would deny access to jobs and tax revenue that could be put back into the community.

Environmentally, the U.S. and the rest of the world would very likely be worse off with regulations that unnecessarily restrict the extraction and delivery of natural gas. U.S. states, as well as other countries, could not only be forced into pricier sources of energy, but could also have higher emissions.

Moreover, restrictions on energy development and transportation infrastructure in the United States is not going to stop the consumption of these resources, but merely shift where they are extracted and how they are transported. Production will shift to places where the environmental standards are not as rigorous. Instead of building pipelines (of which 2.5 million miles of distribution pipelines exist[20]), more energy will be transported by rail and truck. While all three modes of transportation are safe, pipeline delivery is the safest when it comes to protecting human health and public safety.[21]

To be clear, a comprehensive set of regulations at the federal, state, and local levels exist to protect public health and safety—from extraction to delivery and use inside residential and commercial buildings. As it pertains to shale gas development, the Department of Energy explains that federal, state, and local laws regulate "virtually every aspect of exploration, production and site restoration activities, including well design, location, spacing, operation, water and waste management and disposal, air quality, wildlife protection, surface impacts, site closure and health and safety."[22]

With respect to pipelines, the lead regulatory body is the Federal Energy Regulatory Commission (FERC), which coordinates with other agencies such as the Department of Transportation's Pipeline and Hazardous Materials Safety Administration to conduct an environmental and safety assessment.[23] The FERC also validates proposed projects based on demonstrated market need (evidenced by long-term contract commitments) and considers the potential of overdeveloping capacity. Under Section 7 of the Natural Gas Act,[24] FERC regulates the construction and operation of interstate pipeline projections, ensuring that projects comply with Department of Transportation safety standards.[25] In addition, states have their own respective regulations for intrastate pipelines.

It is important to note that companies have a strong incentive to minimize environmental harms. Accidents and spills are costly to a business's bottom line and its reputation.

Recommendations

Unfounded calls for bans on hydraulic fracturing, energy production on federal lands, or the use of natural gas–fired appliances will do far more economic and environmental harm than good. Public policy should protect

human health, safety, and the environment. Courts should hold companies liable for any environmental damage they cause. Prohibitions on natural gas production, transportation, and use inside a home or business fail to take into account any objective cost-benefit analysis.

Alternatively, policymakers should:

- **Allow state regulators to satisfy federal permitting requirements.** Both economically and environmentally, states have proven they can manage energy development prudently. More state oversight, local governance, and private-sector participation would result in more accountable, effective management and a permitting system that is more responsive to changes in prices. States should take the lead role in conducting environmental reviews and permits for natural resource extraction and renewable projects on federal lands within their borders.

  Additionally, states should have the predominant role in authorizing the construction of LNG terminals. Authorizing state regulatory departments to conduct the environmental assessment would ease federal regulatory bottlenecks and could lead to innovative process reforms that the federal government or other state regulatory bodies could replicate. States would still have to meet all federal requirements and could defer to federal regulators as well.

- **Reject calls to ban natural gas in residential and commercial buildings.** Banning new homes and office buildings from gas hookups would deny access to an inexpensive, clean, and dependable fuel source. Prohibiting natural gas from existing buildings would be a massively expensive and unnecessary upheaval for families and businesses. Luring consumers to switch over with subsidy and rebate programs would merely shift the costs. If home and business owners want to become completely electric, they have the option to do so without any government compulsion.

- **Open federal lease auctions to competitive bidding from all market participants**. An alternative approach to a "keep it in the ground" for lease sales on federal lands is to let the market determine if that movement is the highest valued use of the land and its resources. Currently, only energy companies can bid on lease auctions, and the federal government requires leaseholders to demonstrate intent to develop the resources.

Restricting who bids—and requiring the winner develop the parcels—eliminates competition and fails to assess the relative value of the land. Conservationists, recreationists, alternative energy companies, ranchers, or environmentalists may value the land more for their intended use than for oil and gas development. Opening the leasing process to all interested parties would not only create more competition but also potentially more cooperation for productive uses for the land and the resources below it.

Conclusion

Market forces have evolved America's energy landscape in ways that, to most people, was largely unimaginable: Capitalizing on the abundance of natural gas has resulted in significant new investments and job creation across the country. U.S. producers have supplied affordable, dependable energy to domestic and international consumers while improving air quality and the environment. Attacks on natural gas that result in unsubstantiated prohibitions on extraction, transportation infrastructure, and delivery to homes and businesses would reverse that progress.

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