HYDRAULIC FRACTURING: Better for the Environment and the Economy

Hydraulic fracturing, also known as fracking, uses water pressure to create fissures in shale rock formations deep underground to release natural gas and oil. Advances in fracking and horizontal drilling technologies have unlocked billions of cubic feet of natural gas and hundreds of millions of barrels of oil, created millions of jobs, and produced staggering amounts of economic activity. This shale energy revolution has made America the world's top natural gas and oil producer, delivering lower energy prices for consumers in a safer, cleaner, more reliable way.

WATER IS PROTECTED

energy

2,640 FT

0.5 MILE

5,280 FT

7.920 FT

1.5 MILES

1 MILE

Through stringent environmental safeguards, top-of-the-line well designs and applications, and a commitment to safety, the industry delivers valuable natural gas and oil to market without harming our drinking water or the surrounding environment.

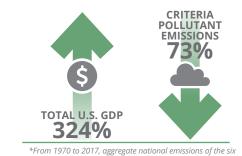
After six years and over \$30 million spent on a study, EPA's Key Findings, included in its Draft Assessment Report, were acknowledged by industry at the study's outset and emphasized repeatedly throughout the research stages and assessment development process. The study's findings recognize that strong industry standards and operational practices, robust state regulatory programs, and federal environmental statutes all work together to address the potential impacts identified.

The science and data clearly demonstrate that hydraulic fracturing **does not** lead to widespread, systemic impacts to drinking water resources and that taxpayers have witnessed a huge expense and time spent only to see final conclusions – which should be based in science – changed to final conclusions based in political ambiguity.¹



AIR IS IMPROVED

By utilizing more natural gas, the U.S. is helping reduce emissions to their lowest levels in a generation. Even with a rising population and growing energy demands around the world, natural gas has allowed us to clean up our air for the benefit of future generations. The key to that is hydraulic fracturing.²



common pollutants alone dropped an average of 73 percent while gross domestic product grew by 324 percent.³ Dr. Ernest Moniz, former Secretary of Energy under President Obama, noted that "We are producing more natural gas in the United States than ever before, which is helping to increase our economic competitiveness and significantly reduce our carbon emissions. Of the natural gas consumed in the United States in 2011, about 95 percent was produced domestically. The Energy Information Administration predicts U.S. natural gas production will increase by 44 percent from 2011 to 2040, growth that will be almost 100 percent attributable to shale gas production."⁴

"At least 2 million (wells) have been hydraulically fracture-treated and up to **95 percent of wells drilled today are hydraulically fractured** using technologies developed with industry under the (DOE's) collaborative research programs."



- Former Secretary of Energy Dr. Ernest Moniz to the Senate Appropriations Committee

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A BOON FOR EVERYONE

The shale gas revolution, which has been tremendously beneficial to the global economy, started right here at home. A 2015 study from the Brookings Institution found that **collective U.S. gas bills fell by \$13 billion every year from 2007-2013** because of increased fracking.⁵ When you include industrial, commercial and electricity consumers, **economic gains totaled \$74 billion each year in that time span**. "The shale boom has reshaped the nation's electric grid, fueled a petrochemical boom along the Gulf Coast and created a burgeoning U.S. industry in liquefied natural gas exports. Of course, the shale oil surge wouldn't have happened without the horizontal drilling and hydraulic fracturing techniques used to trigger the shale gas revolution." – The Houston Chronicle

President Barack Obama in State of the Union Addresses

2012: "We have a supply of natural gas that can last America nearly 100 years, and my administration will take every possible action to safely develop this energy."

- **2014:** "....one of the reasons why is natural gas, if extracted safely, it's the bridge fuel that can power our economy with less of the carbon pollution that causes climate change."
- **2015:** "....we believed we could reduce our dependence on foreign oil and protect our planet. And today, America is number one in oil and gas."



CREATING MORE THAN ENERGY

There's a lot at stake when politicians talk about banning fracking and limiting the potential American resources have to offer. All you have to do is look at the numbers. In 2015 alone, the natural gas and oil industry supported 10.3 million jobs, generated \$714 billion in labor income, and generated \$1.3 trillion in economic benefit. That's 7.6 percent of total U.S. GDP.⁶



Fatih Birol, Executive Director of the International Energy Agency, on Banning Fracking⁷

"...stopping oil and gas production is something that I wouldn't advise to the U.S. government or another government in the world."

"Just banning [fracking] would not be good news, not only for Americans but for Europeans or somebody else." "...would have major implications on the market for the U.S. economy, for jobs growth and everything else, and not good news for energy security, because for example U.S. natural gas provides a lot of security to the markets."



A ban on fracking could raise costs significantly for American families and manufacturers, profoundly damage the U.S. economy, diminish our geopolitical influence, and severely weaken our energy security. The Obama and Trump administrations support our American energy resurgence and they support the clean, effective, and safe hydraulic fracturing technology in use all across the United States today.