

# Natural Gas | America's Abundant, Clean Energy



Today, America has an opportunity to embrace natural gas as a fuel of our future. The United States has vaulted past Russia to become the world's largest natural gas producer and is projected to become a net exporter within the next decade.

This development is attributable to technological innovation in the areas of horizontal drilling and hydraulic fracturing that turned previously inaccessible natural gas resources into producing wells — a 100-year, secure and safe supply of clean burning natural gas. It has also paved the way for significant economic growth and opportunity. Today, the natural gas industry supports nearly 3 million jobs and adds about \$385 billion to the national economy each year.

Natural gas is projected to be an even more significant part of the country's energy mix in years to come. According to the Energy Information Administration (EIA), natural gas represented 28 percent of U.S. energy consumption in 2012 and is expected to grow to 30 percent by 2040. However, as important as natural gas is to today's economy and our future energy needs, more must be done to capitalize on this resource and drive greater economic prosperity, including expediting the approval of U.S. liquefied natural gas (LNG) facilities and exports.

## Creating New Jobs and Strengthening the Economy

Development of unconventional energy resources is a substantial driver of job growth and a more prosperous economic environment. A report by IHS Global Insight showed that the development of shale resources through hydraulic fracturing supported 2.1 million jobs in 2012. This helped drive a 40 percent increase in job growth in the industry between 2007 and 2012, well outpacing overall private-sector job growth of only 1 percent. Continued development is expected to boost that number to 3.9 million jobs by 2025, including more than 500,000 manufacturing jobs and 319,000 chemicals sector jobs.

Hydraulic fracturing is also driving greater personal income, government revenue and domestic economic growth. The average U.S. household enjoyed an additional \$1,200 in disposable income in 2012 from lower energy costs thanks to hydraulic fracturing — a total expected to grow to \$3,500 in 2025. And development of shale resources added \$284 billion to U.S. GDP in 2012, a figure expected to grow to \$533 billion by 2025.

Furthermore, the incredible success of shale gas development has sharply reduced electricity and natural gas costs for local communities across the country.

U.S. public school districts saved \$1.2 billion on electricity and natural gas in the 2012/2013 fiscal year, enough money to employ an additional 14,200 teachers, according to IHS. State and local taxpayers saved \$720 million on public electricity and natural gas expenditures, the approximate cost of an additional 11,000 public-service employees.

The rapid development of America's natural gas resources delivers benefits that go well beyond economic growth. As a clean-burning energy source, natural gas is making a positive contribution to the nation's environmental and energy sustainability goals. U.S. carbon dioxide (CO<sub>2</sub>) emissions are near 20-year lows, and a major reason for that progress is the development and use of America's abundant natural gas resources. EIA projects energy-related CO<sub>2</sub> emissions to be substantially below 2005 levels by 2040 thanks, in large measure, to a continued shift to less carbon-intensive fuels, such as natural gas. Between 2006 and 2012, EPA data show methane emissions fell 40 percent while production of natural gas surged 37 percent. Finally, EPA estimates that technology and improvements led to a 73 percent decrease in methane released by natural gas development since 2011.

These benefits — economic and environmental — are made possible by extraction methods that are safe and proven. Hydraulic fracturing has been in practice for more than 65 years and has been used in more than 1 million wells in the United States alone. State regulation of hydraulic fracturing has been in place since its inception and, together with federal oversight and well-established industry standards, effectively protects the environment and workers.

## **Vital to our Economic Future**

Today's energy debates are often dominated by the need for enhanced energy efficiency and the promise of nonfossil fuel sources. While it is true that renewable sources of energy are growing rapidly and other technology improvements will deliver greater energy efficiency, expected global population and economic growth mean demand is growing even faster.

In fact, EIA's most recent projections show U.S. energy demand increasing by 12 percent between 2012 and 2040, and that oil and natural gas, which together supplied 65 percent of the energy we used in 2012, will still provide 64 percent by 2040. EIA goes on to project that natural gas will meet roughly the same share of industrial and electric power demand and an increasing share of the demand in the transportation and commercial sectors.

Furthermore, America's abundant domestic supply has enabled energy-intensive manufacturing companies that had been moving overseas to stay and, in some cases, return to the United States to take advantage of our domestic energy renaissance.

# Capitalizing on America's Abundant Natural Gas

Natural gas is recognized as being critical to meeting America's surging energy needs now and for the foreseeable future. However, in order for the United States to make the most of the opportunities that its abundant natural gas resources represent, we must develop appropriate policies that encourage continued use of safe, effective and environmentally responsible techniques, including hydraulic fracturing, horizontal drilling and offshore operations.

Freeing America's energy resources for development is essential to growing the economy, enhancing security, spurring job creation, increasing federal, state and local revenue, and improving the U.S. balance of trade. Sixty-six percent of voters say they are more likely to support a candidate in 2016 who supports producing more oil and natural gas, according to a survey by Harris Poll.

Once produced, we need to enable the necessary expansion and extension of the pipeline infrastructure in the United States to get natural gas to customers. Much of the nation's electric generation and heating is becoming more dependent on natural gas, and the United States must have forward-thinking policies in place that ensure the successful build-out of natural gas infrastructure.

The United States also needs to seize the opportunity to become an exporter of LNG, which would reduce the nation's trade deficit, increase government revenue, grow the economy and support millions of U.S. jobs in engineering, manufacturing, construction and facility operations — with no significant price impact projected for domestic consumers.

LNG exports could contribute up to \$31 billion to the economy of Texas alone, and other states will experience ripple effects due to the demands for steel, cement, equipment and other goods. Job gains as high as 155,000 are expected in gas-producing states with additional, indirect gains elsewhere.

The opportunity that LNG exporting poses will not materialize on its own. There is a global race to build the infrastructure necessary to secure a sustainable leadership position. Today, there are more than 60 LNG export projects planned or under construction around the world.

The United States must act quickly to cement its place in this emerging market and secure the economic benefits — otherwise, we will cede the opportunity to other regions and lose a valuable tool for gas and petroleum production as well as global diplomacy. The United States is blessed with a bountiful supply of clean-burning natural gas. This resource is helping cement the country's position as an energy superpower — bringing more and better jobs, supporting a cleaner environment and driving greater levels of economic prosperity. Now is the time for policymakers to continue to embrace natural gas and the opportunities it provides.