



AMERICAN PETROLEUM INSTITUTE

U.S. Exports of Natural Gas: A Common Sense Step That Is Good for the Economy

The U.S. Has Abundant Supplies of Natural Gas

- Industry advancements in hydraulic fracturing and horizontal drilling have led to a dramatic increase in the estimated recoverable shale gas resources located in the United States.
- Increases in estimates of U.S. shale gas resources have raised our overall natural gas supply to more than 2,000 trillion cubic feet, according to estimates from the Energy Information Administration (EIA) and others.
- The EIA estimates our shale gas resources at nearly 482 tcf. Many believe this estimate to be conservative, with ICF International placing the estimated shale gas supplies alone at nearly 2,000 tcf.
- Development of these clean-burning natural gas resources is dependent upon the ability to utilize hydraulic fracturing in operations, as an estimated 70 percent of our domestic natural gas in the future will come through the use of hydraulic fracturing.

Natural Gas Can Be Safely Exported Through LNG

- LNG, or liquefied natural gas, is a clear, odorless, noncorrosive, nontoxic liquid that is formed when natural gas is cooled to around -260 F. This shrinks the volume by about 600 times, making the resource easier to store and transport through marine shipments.
- LNG is not stored under pressure and is not explosive or flammable in its liquid state, and it cannot be released rapidly enough to cause overpressures associated with explosions.
- LNG has been safely handled for several decades, with LNG vessels having made more than 100,000 voyages without major accidents or safety problems.
- The LNG industry is highly regulated by the Federal Energy Regulatory Commission, the Department of Transportation, the U.S. Coast Guard and the Department of Homeland Security, and other agencies to ensure that vessels, facilities and personnel provide and deliver safe operations and transport.

Exporting Natural Gas Through LNG Has Significant Benefits for the U.S.

- A December 2012 NERA study completed for the Department of Energy concluded: "Across all [] scenarios, the U.S. [is] projected to gain net economic benefits from allowing LNG exports. Moreover, for every one of the market scenarios examined, net economic benefits increased as the level of LNG exports increased. In particular, scenarios with unlimited exports always had higher net economic benefits than corresponding cases with limited exports."
- Exporting natural gas would directly support thousands of U.S. jobs in engineering, manufacturing, construction, and operation of the export infrastructure, as well as others indirectly along the equipment supply chain.
- LNG exports will drive additional U.S. natural gas production and support thousands of additional jobs created through increased production: An IHS report on the economic impacts of shale gas estimates that for every 1 Bcf/d of shale gas production, approximately 32,000 total jobs are supported throughout the economy.
- The additional gas production associated with exports would generate billions of dollars annually in much needed federal and state government revenue.
- As with any export, such as coal, grains, steel, machinery, and ethanol, exports of natural gas have beneficial macro-economic impact of reducing the nation's trade deficit.
- Flexibility to export product in times of market imbalance helps the industry operate efficiently and maintain production levels. This enhances US energy security.
- The DOE study concludes that "natural gas price changes attributable to LNG exports remain in a relatively narrow range across the entire range of scenarios." Furthermore, the study states that global markets limit how high U.S. natural gas prices will rise and that U.S. natural gas prices do not become linked to oil prices in any of the cases they examined.