

Economic and Environmental Benefits of U.S. LNG

Top Findings from S&P Global Phase 2 LNG Impact Study Supported by the U.S. Chamber of Commerce



S&P Global's world-leading energy analytics team undertook comprehensive modeling that demonstrates the significant economic and environmental benefits of U.S. LNG.

Top Findings



LNG Economic Benefits Extend to All 50 States

The big picture: The LNG industry powers nearly 495,000 jobs and boosts the economy nationwide, even in states without natural gas production.

Of the nearly 495,000 jobs supported by the LNG industry, **37%—or 183,000 jobs—**are based in states that don't produce natural gas. Similarly, **30%** of the expected \$1.3 trillion in GDP benefits attributable to LNG through 2040 will occur in those same states.

In fact, **39 states have at least 1,000 jobs supported by the LNG industry**, and in 21 states there are more than 5,000 such jobs.

The supply chain for LNG exports spans the country and supports businesses that supply equipment, materials, logistics, IT, construction, and services. States such as Indiana, Kansas, Illinois, and Minnesota will realize **more than \$2,000** in per capita economic benefits from LNG through 2040.



U.S. Chamber of Commerce



Expanded Pipeline Infrastructure Could Deliver Enormous Consumer Benefits

The big picture: Expanding pipelines from the Marcellus region could save Americans \$5.5 billion a year, slashing natural gas and electricity prices, especially in Northeast states.

Due to pipeline constraints, residents in Northeast states pay the highest natural gas prices in the nation. During peak winter periods, wholesale natural gas prices in Boston and New York are roughly **2 ½ times more expensive** than the national benchmark price.

Expanding pipeline capacity out of the low-cost Marcellus and Utica regions in Pennsylvania, West Virginia, and Ohio would save American consumers an average of **\$5.5 billion annually**, for total nationwide **energy cost reductions of \$76 billion through 2040**. Residential gas consumers in Northeast states would benefit the most, with natural gas prices in Boston and New York falling an average of 27% and 17%, respectively, and even greater declines in peak heating months. These pipeline-driven price reductions will save residential gas customers in New England \$1,435 through 2040, while New York and New Jersey customers save \$813.

Industrial and commercial gas consumers would save **\$22 billion and \$12 billion**, respectively, over the study period, while electricity consumers would save \$27 billion.



U.S. LNG Delivers Significant Environmental Benefits

The big picture: Proceeding with the U.S. LNG projects halted by the “Pause” would reduce global emissions and reduce reliance on higher emitting fuels like coal and Russian gas.

Moving forward with the six halted U.S. LNG projects would avoid up to **65 million tons** of GHG emissions annually—an amount equivalent to taking **14 million** gasoline powered vehicles off the road. From 2028-2040 those projects would cumulatively avoid **780 million tons** of GHG emissions – equivalent to 1/3 of all EU energy-related emissions reductions over the last 10 years.

If pending LNG projects were to be halted, 85% of lost export volumes would be replaced by fossil fuels from other countries, including higher emitting coal and oil, and other sources of LNG.

- Life cycle GHG emissions of coal are nearly **70% higher** than U.S. LNG.
- The average methane emissions intensity of Russian LNG and pipeline gas is **44% and 59% higher**, respectively, than the comparable intensity of halted U.S. LNG export projects. The methane emissions [intensity of Algerian pipeline gas—a growing supply source for Europe—is **161% higher** than U.S. LNG.

S&P Global found that methane emissions data across the U.S. natural gas value chain is far more available, transparent, and accurate than in other countries – estimates range between **20-300 times more data**. This lack of methane emissions measurement and transparency outside of the U.S. could mean that the environmental benefits of U.S. LNG exports are significantly understated.