

THE CRITICAL ROLE OF U.S. LNG AND EXPORT AUTHORIZATIONS

WHAT IS THE IMPORTANCE OF U.S. LNG TO U.S. RELATIONSHIPS WITH EUROPE AND KEY TRADING PARTNERS?

- This administration pledged to an additional 50 bcm per year of U.S. LNG to EU by 2030 – this stoppage jeopardizes that promise, U.S. reputation and U.S. relationship with key allies.
- Europe's energy crisis has highlighted the importance of affordable, reliable and resilient supply.
- Halting U.S. LNG exports deprives many countries in Asia and around the world that need LNG in order to reduce their emissions and help their growing economies while providing a reliable source of heat and power.
- With the number of people on the planet expected to increase by a billion by 2030, natural gas and LNG is one of the few energy sources that can meet growing demand while reducing emissions from electricity generation, industry, transportation, and other critical sectors of our economy.

WHAT ARE THE IMPACTS OF U.S. LNG EXPORTS ON DOMESTIC PRICES?

 Long-term: The U.S. Energy Information Administration's (EIA) forecast through 2050 concluded that the continued growth of U.S. LNG

- exports would have only a small impact on prices, projecting prices at \$3.80/MMBtu in a middle-of-the-road reference case.¹
- Short-term: The most recent analysis and forecast from EIA projects Henry Hub prices to average under \$3.00 per MMBtu in 2024 and 2025, even while natural gas consumption and exports increase.
 - * What's more: U.S Henry Hub natural gas prices in 2023 were the lowest since mid-2020, even though LNG and natural gas pipeline exports increased.³

HOW DO U.S. LNG EXPORTS AFFECT THE U.S. ECONOMY?

- The Department of Energy (DOE) has commissioned five studies on the effects of U.S. LNG exports on the U.S. economy and energy markets all of which clearly demonstrate the benefits of LNG exports to the U.S. Economy.⁴ The most recent study states:
 - * "Throughout the entire range of scenarios, this study finds that overall U.S. economic output is higher whenever global markets call for higher levels of LNG exports, assuming that exports are allowed to be determined by market demand."5
 - * This study also found that high levels of U.S. LNG exports would have benefits to the economy by increasing natural gas production with positive effects on labor income in the sector

⁴. Effect of Increased Natural Gas Exports on Domestic Energy Markets, U.S. Energy Information Administration (EIA), January 2012. Macroeconomic Impacts of LNG Exports from the United States, NERA, December 2012. Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets, EIA, October 2014. The Macroeconomic Impact of Increasing U.S. LNG Exports, Center for Energy Studies at Rice University's Baker Institute and Oxford Economics, October 2015. The fifth study—subject to this Notice—the 2018 LNG Export Study was preformed by NERA.

*biERA Economic Consulting, "Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports," June 7, 2018, https://www.energy.gov/sites/prod/files/2018/06/152/Macroeconomic%20LNG%20Export%20Study%202018.pdf, pg. 14.



^{1.} EIA Today in Energy, May 24, 2023

² EIA Today in Energy, May 24, 2023

^{3.} EIA Today in Energy, Jan. 4, 2024 https://www.eia.gov/todayinenergy/detail.php?id=61183)

- and reducing the prices of imported goods and increasing the value of the dollar, leading to higher economic activity.⁶
- * Finally, the study said U.S. LNG exports will continue to stabilize the domestic market and incentivize U.S. natural gas production, which in turn generates billions of dollars in new investments that benefit local communities, produce tax revenues and support jobs, including those in manufacturing. These jobs number in the thousands during construction and in the tens of thousands throughout the supply chain during operations.

HOW MUCH ACTUAL GLOBAL DEMAND IS THERE AND IS IT GOING AWAY SOON?

• The IEA's April 2023 "Outlooks for Gas Markets and Investment" report forecasts that natural gas demand in Africa, the Middle East, and developing Asian markets will continue to grow through 2050, and that "an additional 240 bcm per year of LNG export capacity is needed by 2050 above what currently exists or is under construction." Other credible forecasts from BP and Japan's Institute for Energy Economics project higher global natural gas demand than IEA.

HOW DOES LNG HELP ADDRESS CLIMATE IMPACTS?

Natural gas has played a significant role in reducing CO₂ emissions from the U.S. power sector to 25-year lows because of its relatively low carbon content and because of its role as an integral partner to renewables. When countries increase their use of natural gas for power generation, not only will they reduce their GHG emissions through fuel switching to natural gas they will also have the opportunity to increase their use of renewable energy; natural gas pairs ideally with renewable energy resources, serving as a fast-ramping back-up.

- * A global shift in generating electricity from coal to less carbon-intensive natural gas helped avert 95 metric tons of CO₂ emissions globally in 2018.9
- The DOE has commissioned two studies over two different administrations, to assess the life cycle greenhouse gas emission from U.S. LNG in an effort to fully inform its public interest review under section 3(a) of the Natural Gas Act (NGA). Both reports have concluded that LNG exported from the United States will not increase GHG emissions on a life cycle basis.¹⁰
- Replacing coal with natural gas use not only reduces carbon emissions, but it also helps reduce other pollutants – using natural gas creates little to no emissions of sulfur dioxide, nitrogen oxides or particulate matter that can lead to smog.¹¹
- Across the LNG industry, leading companies are taking action and developing innovations to reduce emissions even further so that we can sustainably meet growing energy needs.¹²

HOW DO U.S. LNG EXPORTS AFFECT THE BALANCE OF U.S. TRADE?

- U.S. LNG plays a key role in balancing trade deficits.¹³
 - * In August 2022, the monthly U.S. natural gas trade surplus peaked at \$4.95 billion.
 - * In that same month, the U.S. trade deficit in goods and services was \$67 billion (\$261 billion in exports, \$328 billion in imports).
 - * Because of natural gas trade, the deficit was reduced by 7.5% to \$72 billion.
- U.S. LNG exports directly reduce the trade deficit by over \$30 billion per year – 1% of the U.S.'s trade balance.¹⁴
- By 2030, the U.S. will have a total of 11 LNG export plants in operations. The combined value of the LNG exported by these plants will reach \$100 billion – or 3% of the US's trade balance.¹⁵



⁶ Page 14. "Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports" prepared by NERA for DOE, published June 2018.

Available at Outlooks for gas markets and investment: a report for the G7 (windows.net). Projection based on IEA "STEPS," or Stated Policies, scenario.
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^{*}International Energy Agency, "Global Energy & CO2 Status Report: The latest trends in energy and emissions in 2018," March 2019,

^{*} International Energy Agency, "Global Energy & CO2 Status Report: The latest trends in energy and emissions in 2018," March 2019 https://www.iea.org/geco/emissions/.

^{10.} National Energy Technology Laboratory, "Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas form the United States" May

National Energy Technology Laboratory, "Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States: 2019 Update" September 2019, https://www.energy.gov/sites/prod/files/2019/09/f66/2019%20NETL%20LCA-GHG%20Report.pdf.

^{11.} Leidos, Inc., A Comparison of Emissions from Major Fuels Used to Generate Electricity in the U.S., 2016.

¹² Center for LNG, The Natural Gas Industry Is Actively Reducing Emissions, Jan 2024

https://www.lngfacts.org/wp-content/uploads/sites/2/2024/01/CLNG_NGSA_Emissions-Reductions-Factsheet-compressed.pdf

^{13.} International Monetary Fund, 2024 list of real GDP growth by country, https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/USA

¹⁴ U.S. Census International Trade Data, 2024, https://www.census.gov/foreign-trade/data/index.html

^{15.} Policy Research Foundation Chart of the Week #2023-45, "Natural Gas Trade Lowers U.S. Trade Deficit," Nov. 2023. https://eprinc.org/wp-content/uploads/2023/11/EPRINC-Chart2023-45-USNaturalGasTradeLowersUSTradeDeficit-Revised-Version1.pdf