**BEFORE THE**
**UNITED STATES TRADE REPRESENTATIVE**
**WASHINGTON, D.C.**

Docket ID **USTR-2025-0013**

# COMMENTS IN RESPONSE TO "NOTICE OF PROPOSED MODIFICATION OF ACTION IN SECTION 301 INVESTIGATION OF CHINA'S TARGETING MARITIME, LOGISTICS, AND SHIPBUILDING SECTORS FOR DOMINANCE"

**FILED BY**
**AMERICAN PETROLEUM INSTITUTE**
**THE CENTER FOR LNG**

July 7, 2025

# U.S. LNG Industry Comments on the Notice of Proposed Modification of Action in Section 301 Investigation of China's Targeting Maritime, Logistics, and Shipbuilding Sectors for Dominance

## Table of Contents



## 1. Overview of Comments

The American Petroleum Institute (API) and the Center for LNG (CLNG), welcome the opportunity to comment on the United States Trade Representative's (USTR) Notice of Proposed Modification of Action in Section 301 Investigation of China's Targeting the Maritime, Logistics, and Shipbuilding Sectors for Dominance ("the Action").[1]

The U.S. liquefied natural gas (LNG) industry supports the Trump Administration's goals of revitalizing U.S. shipbuilding and countering China's unreasonable actions to dominate the shipbuilding, logistics, and maritime sectors. However, even as modified, the April 17, 2025, USTR Action risks disrupting various segments of the U.S. oil and natural gas industry, especially exports of LNG and imports and exports of crude oil and refined products, and could conflict with or undermine President Trump's vision for achieving domestic energy dominance. As such, we recommend USTR remove Annex IV in its entirety from the Action. We appreciate the opportunity to provide comments for USTR's consideration.[2]

[1] Notice of Action and Proposed Action in Section 301 Investigation of China's Targeting the Maritime, Logistics, and Shipbuilding Sectors for Dominance, Request for Comments, Apr. 17, 2025 [*hereinafter* the Apr. 17, 2025, USTR Notice of Action and Proposed Action in Section 301].

[2] Notice of Proposed Modification of Action in Section 301 Investigation of China's Targeting the Maritime, Logistics, and Shipbuilding Sectors for Dominance, Jun. 12, 2025. [*hereinafter* the Jun. 12, 2025, USTR Notice of Proposed Modification of Action in Section 301].

USTR's proposed removal of paragraph (j) of Annex IV, which allows for the revocation of an LNG export license issued by the Department of Energy (DOE), will remove some of the direct and immediate harm to the U.S. LNG industry. Much like the 2024 LNG permitting pause[3], the threat of export license revocation could undercut credibility and stability in U.S. LNG export markets and disadvantage U.S. LNG in the global energy marketplace. We thank the Trump Administration for ending the extremely misguided policy of the pause on Day One of the new administration through the issuance of Executive Order 14154 on Unleashing American Energy.[4]

While the proposed removal of Annex IV, paragraph (j) is an improvement, we remain concerned by the requirements of Annex IV and their impacts on the U.S. LNG industry. The administrative record in this proceeding currently does not support the adoption of unique and burdensome requirements specifically for U.S. LNG. USTR has not explained, or solicited comments on, its reasons for concluding that U.S. LNG shipping should be singled out and treated differently from all other U.S. energy and commodity exports. Putting restrictions on U.S. LNG vessel owners or operators will seriously undermine the competitiveness of the U.S. LNG industry by setting restrictions that are impossible to comply with given the current state of the U.S. shipbuilding industry and supporting industrial infrastructure that will significantly drive up costs for the LNG sector.[5] Accordingly, to maintain the continued strength and global competitiveness of the U.S. LNG industry and its contribution to U.S. energy leadership, we recommend that USTR remove Annex IV in its entirety from the Action and clarify that LNG vessels serving U.S. export facilities qualify for the existing exemptions under either Annex I or II in the Action that apply to vessels arriving empty or in ballast, and for specialized or purpose-built vessels designed to transport chemical substances in bulk liquid form.[6]

The U.S. LNG industry supports the USTR's findings, as well as the goals of President Trump's Executive Order 14269 on Restoring America's Maritime Dominance, that there is a critical need to counter Chinese dominance in the maritime, logistics, and shipbuilding sectors, and to revitalize American shipbuilding.[7] However, while China has unfairly subsidized its shipbuilding industry without regard to the free market, Annex IV of the USTR Action would penalize the U.S. LNG industry without slowing China's ambitions.

**Interest of the Commenters**

**The American Petroleum Institute (API)** is a national trade association with approximately 600 member companies involved in all segments of the oil and natural gas industry. API's members include producers, refiners, suppliers, pipeline operators, and marine transporters, as well as service and supply companies that support all segments of the industry. API advances its policy priorities by collaborating with industry, government, and customer stakeholders to promote continued availability of our nation's abundant oil and natural gas resources for a more secure energy future. API frequently participates in proceedings before federal agencies, as well as in litigation in state and federal courts.

**The Center for Liquefied Natural Gas (CLNG)** is a trade association that promotes public policies advancing the use of natural gas in the United States and its export internationally. As a committee of the Natural Gas Supply Association, CLNG represents the full value chain, including LNG producers,

---

[3] Dept. of Energy, *The Temporary Pause on Review of Pending Applications to Export Liquefied Natural Gas*, Feb. 2024.
[4] Executive Order 14154, Unleashing American Energy, Jan. 20, 2025.
[5] Colin Grabow, New Shipping Fees and Requirements Pose Fresh Threat to US Economy, CATO, May 19, 2025.
[6] Apr. 17, 2025, USTR Notice of Action and Proposed Action in Section 301.
[7] Executive Order 14269, Restoring America's Maritime Dominance, Apr. 9, 2025.

shippers, terminal operators, and developers. This broad representation endows CLNG with a distinct vantage point on how LNG—an abundant, versatile, and clean fuel—can help meet the world's energy needs while simultaneously reducing emissions and supporting domestic economic growth.

**2. Annex IV fails to address China's unfair practices effectively**

The stated goal of the Section 301 investigation is to counter China's unfair trade practices in the maritime, logistics, and shipbuilding sectors. However, Annex IV's restrictions on LNG shipping do not directly address these practices and instead penalize U.S. LNG exporters.

a. **Misaligned policy tool:** Imposing restrictions on U.S. LNG exports does not target Chinese shipbuilding dominance or incentivize U.S. shipbuilding capacity. Instead, it burdens U.S. exporters and their supply chains, which have no direct connection to China's practices. A more effective approach would focus on targeted measures, such as incentives for U.S. shipbuilding innovation, without disrupting the LNG sector.

b. **Collateral damage to U.S. interests**: Annex IV's requirements disproportionately harm U.S. companies and workers while doing little to curb China's influence in global shipbuilding. For example, the lack of U.S.-built LNG carriers means exporters would face compliance challenges with no viable domestic alternatives, effectively punishing American businesses rather than addressing Chinese practices.

c. **China is not dominating global LNG shipping**: South Korean shipbuilders have constructed about two-thirds of the global LNG carrier fleet; Japanese shipbuilders are second, accounting for another 15 percent of the fleet.[8] Today, Chinese-built LNG carriers represent about 6 percent of the fleet.[9] While Chinese shipbuilders are expanding production, South Korea will remain the dominant builder of LNG carriers. The state of the market does not justify the unique restrictions USTR has applied only to the U.S. LNG export industry.

**3. The proposed Action is practically infeasible**

While industry appreciates the proposed removal of subsection (j) of Annex IV regarding revocation of a DOE export license, compliance with the other requirements of Annex IV placing restrictions on how U.S. LNG is exported, regardless of whether the responsibility for compliance is placed on U.S. LNG exporters or LNG vessel owners and operators, is unrealistic and will continue to disproportionately impact the U.S. LNG industry and not Chinese entities. The schedule of restrictions outlined in paragraph (f) of Annex IV of the Action are impossible to comply with due to the current reality and capabilities of shipbuilding in the U.S., especially for LNG vessels. Last year, more than 1,400 cargoes of U.S. LNG were delivered to buyers around the world – a number that is slated to nearly double by the end of the decade as terminals that are currently under construction enter service. [10] Under USTR's requirements for 1 percent

[8] Fauziah Marzuki, *Korea to Dominate LNG Shipbuilding Despite US Wishes*, Bloomberg, May 1, 2025; 2025 World LNG Report | International Gas Union.
[9] *Id.*
[10] DOE, Fossil Energy and Carbon Management Office of Resource Sustainability, U.S. Natural Gas Imports and Exports Monthly December 2024.

of U.S. LNG exports starting in 2029 to be transported on U.S.-built vessels, as many as six U.S.-built LNG vessels would be required by the end of the decade, which is not feasible, as we explain below.[11]

LNG carrier production in the U.S. has long been dormant, with the last domestically constructed vessel being built in 1980[12]. Over that same period, ally nations have used government funds to invest in industries and supply chains to construct LNG carriers and their advanced components. [13] Those investments have produced a global fleet of over 700 vessels, approximately 77% of which are South Korea-built.[14]

In addition to a lack of LNG shipbuilding capacity in the U.S., it is also relevant to note there is only one U.S.-flagged LNG vessel operating in the U.S. and it is primarily used in delivering U.S. LNG to Puerto Rico. [15] This LNG carrier was not built in the U.S. and is 130,400 cubic meters, half the size of the LNG carriers used to ship LNG from the U.S. around the globe.

**a. There is a limited ability to access key shipbuilding components and build LNG vessels in the U.S.**

LNG vessels are among the most complex ships to build. These massive vessels require large dock space as well as highly specialized equipment and technology, the acquisition and use of which requires qualification and licensing. Additionally, access to the key components to construct these vessels to satisfy the USTR's definition of U.S.-built is not domestically available, further complicating the ability of U.S. shipyards to build LNG carriers.[16] The time and capital investments that would be required across the LNG shipbuilding supply chain would be significant, extending well beyond the timeframe which USTR has set for industry compliance.[17]

The USTR Action outlines the requirements for a vessel to be considered built in the United States, including the requirement that certain key components of the vessel are manufactured in the United States.[18] Many of the essential components required for LNG shipbuilding are not produced in the U.S., though they are manufactured and sourced from countries that are close allies.[19] Main propulsion equipment such as engines are manufactured in Germany, Japan, South Korea, and Switzerland. Auxiliary power generators such as dual fuel diesel engines are produced in South Korea, Italy, and Finland. To construct an LNG carrier, essential cargo handling systems like cryogenic cargo pumps, compressors, custody transfer management systems (CTMS), nitrogen generators, reliquefaction plant, and vaporizers are manufactured in Japan, Sweden, France, Norway and the United Kingdom. Of these key components, only two are

---

[11] Apr. 17, 2025, USTR Notice of Action and Proposed Action in Section 301; Appendix Item 1: Gibson Shipbrokers: Section 301: LNG Impact Analysis "Can U.S. shipbuilding rise to the challenge?", April 2025; Institute for Energy Research, *Trump Asked to Exclude Energy Products from New Proposed Shipping Rules*, May 13, 2025.
[12] GAO, Maritime Transportation: Implications of Using U.S. Liquefied- Natural-Gas Carriers for Exports, December 2015 [hereinafter 2015 GAO Report].
[13] Costas Paris, *Asia State Players Wield Subsidies to Dominate Shipping*, WSJ, Dec. 2, 2018.
[14] Fauziah Marzuki, *Korea to Dominate LNG Shipbuilding Despite US Wishes*, Bloomberg, May 1, 2025.
[15] Nick Blenkey, *Crowley puts U.S.-flagged LNG carrier American Energy into Puerto Rico service*, Marine Log, Mar. 18., 2025.
[16] Appendix Item 2: Center for LNG, LNG Carrier 101 and U.S. Shipbuilding Challenges
[17] Appendix Item 1: Gibson Shipbrokers: Section 301: LNG Impact Analysis "Can U.S. shipbuilding rise to the challenge?", April 2025; 2015 GAO Report; Apr. 17, 2025, USTR Notice of Action and Proposed Action in Section 301; Chamber of Shipping of America, : Docket Number USTR-2025-0013 – Notice of Proposed Modification of Action in Section 301 Investigation of China's Targeting the Maritime, Logistics, and Shipbuilding Sectors for Dominance, Jul. 2, 2025.
[18] Apr. 17, 2025, USTR Notice of Action and Proposed Action in Section 301.
[19] Appendix Item 2: Center for LNG, LNG Carrier 101 and U.S. Shipbuilding Challenges.

currently manufactured domestically – CTMS and nitrogen generators.[20] Creating the necessary domestic manufacturing capacity for these components would require significant time beyond the Annex IV timelines, as well as investment and manufacturing partnerships with allied countries[21].

Beyond access to key components, substantial investments in and upgrades to U.S. shipyards would be required to accommodate the construction of LNG carriers. According to the Government Accountability Office (GAO), two shipyards in the U.S. have docks long enough (approximately 1,000 ft) to construct LNG carriers of necessary size for international trade, but it is unclear if the width of these shipyards would fit a modern LNG vessel, necessitating significant infrastructure upgrades.[22] While widening the current building docks of the two shipyards, the shipyards would be unable to build any ships during this time, further reducing America's ability to build any ship type while this work was ongoing. Further, domestic shipyards would need to acquire specialized equipment and technology to build the LNG containment system. Acquiring this technology is only possible through the completion of a qualification process, including demonstration of constructing a workable containment system, to be certified and licensed to use the technology. No U.S. shipyards have completed this qualification process for ships of this size.

Even with access to key components and proper certification and licenses in place, shipyard availability could limit construction of LNG carriers to meet USTR's requirements to export U.S. LNG on U.S.-built vessels by 2029. Shipbuilding capacity at yards large enough to accommodate the construction of these vessels is unavailable for several years as they fulfill current orders. Industry representatives have indicated the timeline from order placement to a commercially viable vessel could take 4 to 5 years, perhaps longer when factoring in the time required for infrastructure upgrades, workforce training, the qualification, certification, licensing and technological transfer processes, other regulatory approvals as required, and construction.[23] GAO also estimates it could take over 30 years to build the up to 100-vessel fleet needed for U.S. LNG exports potentially required by this Action.[24]

With a lead time of 4 to 5 years given the lack of shipyard capacity, it is estimated that an LNG ship would take one year of construction time at the building dock, meaning that with two shipyards, 100 percent focusing on LNG vessels, the U.S. LNG ship production rate would be two LNG vessels per year putting the U.S. well past the 2029 timeline. Further, this would restrict the shipyards from building any other vessel types such as oil tankers or container ships, which could be built much faster than an LNG ship at 2 to 3 per year per shipyard. Until modern shipyards, of the size seen in South Korea or China, with multiple large building docks are built in the United States, there will be limited ability for America to produce the number of vessels needed, in all sectors. Concentrating on LNG vessels, and the relatively long production schedules LNG ships have compared to other vessel types, will have a detrimental impact on U.S. shipbuilding with fewer total vessels being delivered per year.

**b. Workforce challenges**

Should U.S. shipyards have the necessary infrastructure and capacity in place to domestically produce LNG carriers, workforce challenges exist on two fronts: laborers at the shipyards to construct and maintain the vessels and mariners to operate the vessels, as required by the USTR Action.

---

[20] *Id.*
[21] Appendix Item 3: American Petroleum Institute, Shipyard comparison: Geoje (SK) vs. Philadelphia.
[22] 2015 GAO Report; Appendix Item 3: American Petroleum Institute, Shipyard comparison: Geoje (SK) vs. Philadelphia.
[23] Appendix Item 1: Gibson Shipbrokers: Section 301: LNG Impact Analysis: "Can U.S. shipbuilding rise to the challenge?", April 2025; 2015 GAO Report
[24] 2015 GAO Report.

First, the United States lacks the skilled labor necessary to build LNG carriers.[25] These ships require highly specialized skills and training that are currently absent from our domestic workforce. Shipyard representatives estimate that building even a single large LNG carrier would demand hiring around 1,000 short-term laborers, and critically, an additional 250-300 skilled Korean laborers would be needed just to ensure the work meets quality standards. While theoretically, reliance on foreign expertise could decrease over time as domestic workers gain experience, the immediate and substantial need for foreign skilled labor highlights a significant initial hurdle. Furthermore, many of these "new" shipbuilding jobs might not even represent a net gain for the overall U.S. economy. While this activity would create new jobs within the domestic shipbuilding industry it will also increase the competition for this talent in other industries, like construction, which is already facing labor shortages. This means simply reallocating workers from sectors already grappling with labor shortages, rather than creating truly new employment opportunities.

Second, the challenge of crewing and manning these vessels is equally, if not more, daunting. The U.S. Maritime Administration has stated that there is already a lack of mariners to meet the current needs of commercially operated vessels in the United States.[26] The United States currently has only one U.S.-flagged large-scale LNG carrier in service, which, as described above, is half the capacity of a modern LNG carrier and primarily serves to deliver LNG to Puerto Rico. This stark reality means there is an extremely limited pool of mariners available who are qualified to operate U.S.-built and U.S.-flagged LNG carriers, as mandated by the Jones Act and the USTR Action. Operating an LNG carrier requires a crew of 20 to 26 mariners.[27] However, when accounting for essential factors like vacation, other leave, and ongoing training, some mariner groups suggest that twice that many mariners would be required per vessel to ensure continuous operation. A growing U.S. LNG fleet would, therefore, necessitate a massive and rapid increase in the number of trained mariners.

This problem is compounded by the extensive training and experience required by the Coast Guard for a "tankerman" credential, which is essential for handling LNG. Industry standards and contracts, for LNG buyers, charterers and global LNG import/export terminals require that the ship's crew meet Society of International Gas Tanker and Terminal Operator's (SIGTTO) competency standards, which mandates minimum experience time onboard LNG ships, per rank of officer. Until an officer has obtained this experience level they cannot progress to the next rank. Gaining this experience is incredibly difficult for U.S. mariners and essential to work on an LNG vessel, due to the severe lack of U.S.-flagged vessels to gain experience on and the limited employment opportunities on foreign-flagged vessels. Without a viable pathway for mariners to gain the necessary experience and credentials, the idea of a significantly expanded U.S.-flagged LNG fleet remains an unrealistic aspiration.

## 4. Comments on paragraph (j) of Annex IV on revoking export licenses

Industry appreciates USTR's proposal to remove paragraph (j) of Annex IV of the Action, which if finalized, would provide some relief from direct and immediate harm to the U.S. LNG industry. However, it is critical to note that Annex IV of the Action will continue to have significant negative impacts to the competitiveness of the U.S. LNG industry.

Paragraph (j) of Annex IV of the Action allows for the suspension of LNG export licenses issued by DOE if the requirements of Annex IV are not met. These requirements are outlined in paragraph (f) of Annex IV and detail a schedule for all LNG exported by vessel in a calendar year to be transported on an

[25] Inti Pacheo and Costas Paris, I*n Shipbuilding, the U.S. Is Tiny and Rusty Trump seeks to revive production of boxships and tankers that left America long ago*, WSJ, Mar. 2, 2025; 2015 GAO Report.
[26] Shortage Of U.S. Mariners and Recruitment and Retention in the United States Coast Guard, 118th Cong. (2023) (testimony of the Hon. Ann C. Phillips, Maritime Administrator, U.S. Dept. of Transportation).
[27] 2015 GAO Report.

increasing percentage of U.S.-built vessels. The timelines in this schedule are impossible to achieve, for reasons previously stated. As a consequence, the U.S. LNG industry could be in violation of these restrictions and eligible for the enforcement mechanisms in paragraph (j) allowing for revocation of a DOE export license.

Suspension or revocation of a DOE export license would disproportionately impact and penalize U.S. LNG terminal owners for something they generally have little control over, *as the majority of U.S. LNG is not transported by U.S. LNG terminal owners.*[28] *Most U.S. LNG contracts are free on board (FOB), meaning the buyer takes ownership of the LNG at the port and arranges its own shipping. Accordingly, U.S. LNG companies typically play no role in LNG shipping and have little control over the means of transport*.[29] Further, it is unclear how the enforcement of paragraph (j), whereby individual LNG exporting companies could have a DOE export license revoked, would apply if the requirements of paragraph (f) of Annex IV apply to the entire U.S. LNG industry or fleet of LNG vessels servicing U.S. export terminals as a whole.

LNG terminal developers have invested billions of dollars in existing facilities and are planning on investing similar amounts in new projects, based upon their reliance on the durability and stability of permits, such as export authorizations issued by DOE.[30] It is of the utmost importance to preserve the integrity of these permits that serve as the foundation for projects to move forward and continue operations. In 2018, during the First Trump administration, DOE stated that it "takes very seriously the investment backed expectations of private parties subject to its regulatory jurisdiction."[31] Accordingly, DOE also previously affirmed that it would never revoke a previously granted export authorization absent "extraordinary circumstances", and even then, only after an opportunity for hearing.[32]

While it supports the removal of the explicit threat to revoke LNG export authorizations from the final Action, if Annex IV is retained, the U.S. LNG industry urges the USTR to go one step further and state in the text of the final Action that implementation of the restrictions set forth in Annex IV will not result in the suspension, revocation or modification of any existing or pending LNG export authorization. This would be consistent with the assurance provided by DOE to support the growth of a sustainable LNG industry.

Limitations on the ability of LNG exporters to obtain key permits and freely export LNG could have far-reaching ramifications that may affect the growth of the LNG industry by restricting its ability to build out critical infrastructure, thereby risking the abundance of benefits U.S. LNG provides to the American economy and energy security. Recent studies have confirmed the established benefits of U.S. LNG for the American public. S&P Global found that the U.S. LNG industry has contributed approximately $408 billion to U.S. GDP and created 273,000 U.S. jobs, and by 2040, is projected to result in $2.5 trillion in revenue for U.S. businesses, including over $900 billion in expenditures, $165 billion in tax revenue, and $250 in income per year per household.[33] Conversely, S&P also found that restrictions on additional U.S. LNG export licensing may risk about 101,000 jobs, $33 billion in state and local tax revenue, and $251

[28] 2015 GAO Report.
[29] *Id.*
[30] S&P Global, Major New US Industry at a Crossroads: A US LNG Impact Study – Phase 1, Dec. 17, 2024.
[31] U.S. Dept. of Energy, Policy Statement Regarding Long-Term Authorizations To Export Natural Gas to Non-Free Trade Agreement Countries, 83 FED. REG. 28841, 28842 (June 21, 2018) ("DOE is firmly committed to the durability and stability of the non-FTA export authorizations it has granted to date, and to any export authorizations issued by DOE in the future").
[32] Letter from Paula Grant, U.S. Dept. of Energy, to Sen. Lisa Murkowski, Oct. 17, 2013.
[33] S&P Global, Major New US Industry at a Crossroads: A US LNG Impact Study – Phase 1, Dec. 17, 2024.

billion in GDP growth. Without the availability of additional U.S. LNG, 85 percent of the global energy demand gap would be filled with fossil fuels sourced from outside the United States.[34]

## 5. Annex IV of the USTR Action may negatively impact the cost competitiveness of and demand for U.S. LNG

As discussed above, industry welcomes the proposed changes to remove paragraph (j) of Annex IV of the Action which provides the ability to revoke an LNG exporter's DOE export license. However, even with this modification, Annex IV of the Action will still have significant negative implications for U.S. LNG, regardless of whether the obligation for implementation is moved from U.S. LNG exporters to other entities, such as vessel owners and operators. If implemented, Annex IV of the Action will harm the competitiveness of U.S. LNG in the global marketplace by increasing regulatory uncertainty for LNG shipowners and LNG producers and potentially U.S. LNG prices relative to other suppliers. The global LNG market is competitive and customers are unlikely to assume a higher cost for their LNG, to simply buy it from the United States when there are other options in the market. Over time, this could have a chilling effect on new U.S. LNG export infrastructure project decisions and, subsequently, the growth of the LNG industry and the significant benefits it provides the U.S. public. To maintain the strength and competitiveness of the U.S. LNG industry, and the role it plays in U.S. energy dominance, USTR should remove Annex IV of the Action in its entirety. It should also apply the exemptions in Annex I or II of the Action for vessels arriving empty or in ballast and for specialized or special purpose-built vessels for the transport of chemical substances in bulk liquid forms to LNG export vessels.[35]

### a. Competitive nature of U.S. LNG

The United States is the world's largest exporter of natural gas, due in no small part to the availability of an abundance of competitively priced natural gas that has fueled a demand for exports, while ensuring Americans have historically paid some of the lowest residential gas prices in the world.[36] The mandate in Annex IV to require U.S. LNG be transported on U.S.-built LNG vessels will put this competitive advantage in jeopardy.

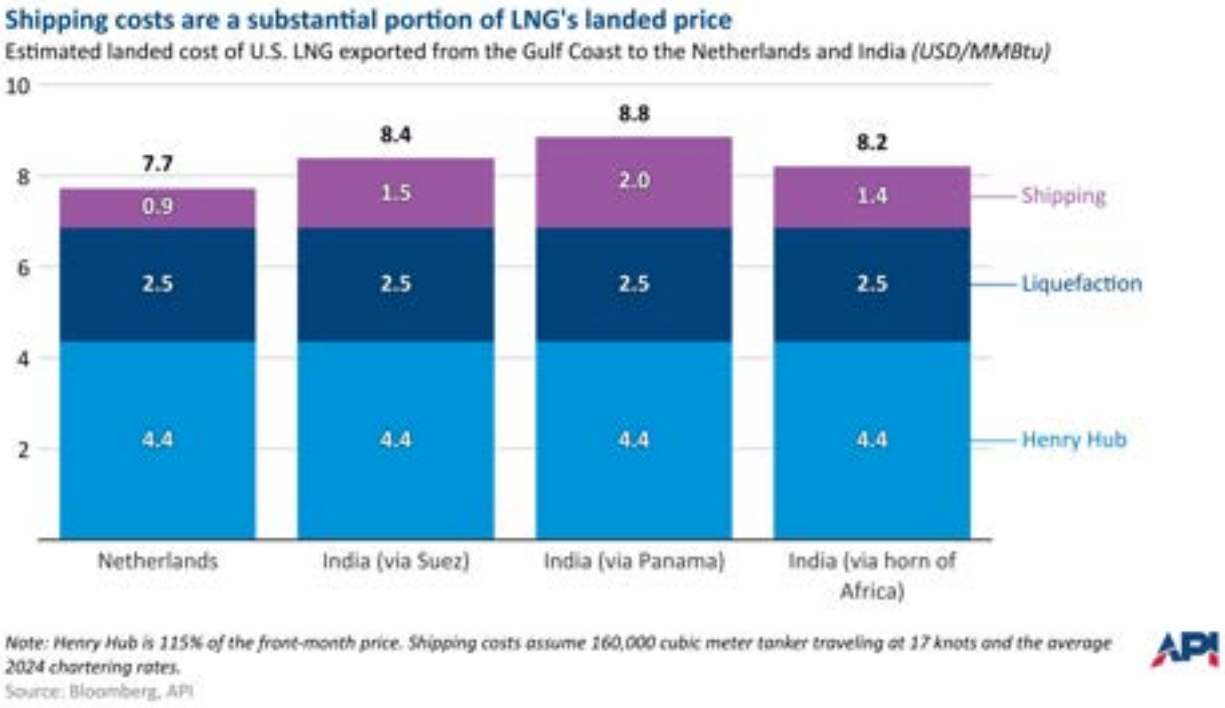
Shipping accounts for a substantial portion of the "landed cost" of U.S. LNG exports, which consists of the cost of natural gas, liquefaction process costs, and shipping costs. If the added costs of building, manning, and operating LNG vessels in the United States, as required by the Action, are passed on to shippers and buyers, this could drastically undermine the competitiveness of the United States in the global market. Industry estimates pricing for new LNG vessels built in the United States could be as much as two to four times more expensive than South Korean-built ships, or up to $1 billion per vessel, compared to about $250 million for those built in South Korea, directly increasing shipping costs compared to competitors.[37]

While the U.S. is currently the largest exporter of natural gas, other countries also have robust LNG export capabilities that continue to grow and could gain an advantage over U.S. exporters should unnecessary regulatory hurdles, such as the Action, delay infrastructure or increase commercial costs.[38]

---

[34] *Id.*
[35] Apr. 17, 2025, USTR Notice of Action and Proposed Action in Section 301.
[36] Energy Ventures Analysis, Impact Analysis of U.S. Natural Gas Exports on Domestic Natural Gas Pricing, 2024.
[37] Greg Miller, *Reintroduced US SHIPS Act will target owners of Chinese newbuilds*, Lloyd's List Intelligence, Apr. 30, 2025; Appendix Item 1: Gibson Shipbrokers: Section 301: LNG Impact Analysis: "Can U.S. shipbuilding rise to the challenge?", April 2025; CATO Institute, New Shipping Fees and Requirements and Requirements Post Fresh Threat to US Economy, May 19, 2025;
[38] Bloomberg, *Mideast oil giants bring their billions in search of LNG riches*, Politico Pro, Jun. 20 2025.

This is particularly critical in a volatile market where buyers are highly sensitive to costs. The higher costs for ships could double the shipping costs for U.S. LNG. As shown below, the estimated landed cost of U.S. LNG to India via the horn of Africa is $8.2 per MMBtu. Doubling the shipping cost would increase the landed cost by 17 percent.




### b. Impacts to demand for U.S. LNG

The demand for natural gas and LNG is predicted to grow well into the future. The International Energy Agency (IEA) forecasted that global demand for natural gas would reach an all-time high in 2024 and is expected to grow even more in 2025.[39] A significant portion of this demand is predicted to come from Southeast and South Asia, in countries such as India or Vietnam, where demand is expected to nearly double by 2050 due to economic growth and a move away from higher-emitting fuels like coal.[40]

Most notably, the Energy Futures Initiative predicts that natural gas demand in South Asia alone could increase six-fold by 2050 due to growth in the industrial sector – namely refining, fertilizer and textiles – which cannot easily be electrified.[41] However, many of the countries in South and Southeast Asia that are expected to drive demand growth – India, Bangladesh, Pakistan, and Vietnam – are price sensitive and tend to buy more LNG when prices are muted.[42] When prices rise, demand weakens as these buyers opt for alternative, cheaper domestic fuel supplies such as coal. Higher prices for U.S. LNG can also lead potential buyers to purchase from competing exporting nations like Qatar. Imposing the Annex IV requirements that would result in increased shipping costs for U.S. LNG could significantly drive up prices

[39] IEA, Global Gas Security Review 2024.
[40] Wood Mackenzie, Asisa LNG Demand Assessment, Oct. 2024.
[41] Energy Futures Initiative, The Future of Natural Gas in a Low-Carbon World, Apr. 30, 2024.
[42] Clyde Russell, *Rising spot LNG prices starting to bite some Asian buyers*, Reuters, Apr. 24, 2024; Marwa Rashad; *Asian spot LNG prices down amid low demand during Lunar New Year Holiday*, Reuters, Jan. 31, 2025.

of U.S. LNG and reduce the cost-competitiveness of U.S. LNG, reducing demand in price-sensitive markets.

## 6. Comments on reporting requirements

Subparagraph (k) of Annex IV of the Action includes reporting requirements beginning April 16, 2028, for LNG export terminals to report to DOE the LNG shipments, and percentage of LNG shipped, on U.S.-flagged, U.S.-built, and U.S.-operated vessels.[43] We acknowledge that USTR has requested comment on modifying paragraph (k) by applying the data reporting requirements to vessel owners and operators instead of on LNG export terminal owners and asks; if that is not appropriate, which entity the requirements should apply to. In response, we recommend the removal of the entirety of Annex IV to ensure the competitiveness of the U.S. LNG industry. Beyond that, we recommend USTR ensure that other modifications to the Action do not disproportionately burden the U.S. LNG industry while effective steps are taken to counter Chinese maritime dominance.

## 7. Clarification on LNG Vessels with Sale and Leaseback Financing Arrangements from Chinese Banks and Annex I Requirements

We urge the USTR to explicitly clarify that LNG vessels with sale and leaseback financing arrangements (or similar) from Chinese banks are not subject to the requirements of Annex I of the Section 301 Action. Annex I targets vessels owned or operated by Chinese entities. However, LNG vessels operated by non-Chinese companies to export U.S. LNG, even if financed through lease arrangements with Chinese banks, should not fall within this scope.

### a. Nature of Lease Financing

Sale and leaseback financing from Chinese banks involves a financial arrangement, not operational control by Chinese entities. These vessels are typically registered under international flags and operated by U.S. or international companies, subject to strict regulatory oversight, including U.S. Coast Guard regulations. Including such vessels under Annex I would mischaracterize their operational status and impose unwarranted restrictions.

### b. Impact on U.S. LNG Exporters

Subjecting these vessels to Annex I requirements would increase costs and disrupt global LNG supply chains, undermining U.S. LNG competitiveness without advancing the USTR's objectives of countering Chinese trade practices.

### c. Alignment with the USTR's Goals

Excluding LNG vessels with Chinese sale and leaseback financing arrangements (or similar) from Annex I aligns with the USTR's aim to target Chinese dominance in shipbuilding while avoiding unnecessary burdens on U.S. industries. This clarification would provide certainty to U.S. LNG exporters and their financial partners, supporting continued investment in the sector.

[43] Jun. 12, 2025, USTR Notice of Proposed Modification of Action in Section 301.

## 8. Effectively combatting Chinese shipbuilding, maritime, and logistics dominance

The U.S. LNG industry agrees with USTR's assessment of the urgent need to address China's dominance in maritime, logistics, and shipbuilding, and to reinvigorate domestic shipbuilding capabilities. While China has heavily subsidized its shipbuilding industry in ways that distort the free market, the proposed USTR Action would inappropriately place a substantial burden on the U.S. LNG sector. To bring U.S. shipbuilding infrastructure up to capacity to be able to construct LNG vessels, it would take significant investment, development, and time. Such efforts would require infrastructure upgrades, workforce training, licensing and technological transfer, regulatory certification, and first vessel construction, a process that could take at least seven years and up to $2.4 billion in total investments culminating in construction of LNG vessels at industry estimates of up to $1 billion per vessel.[44]

## 9. Conclusions and recommendations

The U.S. LNG industry supports the Administration's commitment to advancing U.S. energy dominance and recognizes the importance of addressing China's strategic targeting of the maritime, logistics, and shipbuilding sectors. While the Action seeks to confront these challenges, its current form does not reflect the commercial realities of the LNG industry. If implemented, it would severely impact the competitiveness of U.S. LNG exports and the broader domestic production sector.

The U.S. LNG industry thanks USTR for the opportunity to comment on potential modifications to the Action. However, while the proposed removal of paragraph (j) authorizing revocation of a DOE export license removes an immediate threat to the U.S. LNG industry, further action is needed to preserve the strength and global competitiveness of U.S. LNG and its critical role in advancing U.S. energy dominance. USTR should remove Annex IV from the Action in its entirety and include LNG vessels in current exemptions in Annex I or II for vessels arriving empty or in ballast, and for specialized or purpose-built vessels designed to transport chemical substances in bulk liquid form.

The United States is currently the world's leading exporter of LNG, but the Action could significantly increase the cost of U.S. LNG exports, reducing the competitiveness of U.S. LNG in the global market. If buyers are unwilling to absorb the increased costs and instead reduce their offtake of U.S. cargoes, the U.S. risks losing its position as the top global LNG exporter, running counter to the Trump Administration's goal of achieving energy dominance.

A decline in the U.S. LNG industry could significantly impact pending projects, resulting in broader economic harm. These construction projects drive substantial economic growth and job creation in the communities where they are based, while also stimulating local business activity and generating critical tax revenue. Future LNG export projects are widely recognized as key contributors to economic development, global supply diversification, mitigation of trade imbalances and enhanced energy security for U.S. allies. As the Administration continues to advance its energy dominance agenda, it is essential to ensure that new policies do not inadvertently undermine the very industries that support both domestic prosperity and international stability.

---

[44] Appendix Item 1: Gibson Shipbrokers: Section 301: LNG Impact Analysis: "Can U.S. shipbuilding rise to the challenge?", April 2025; Greg Miller, *Reintroduced US SHIPS Act will target owners of Chinese newbuilds*, Lloyd's List Intelligence, Apr. 30, 2025; 2015 GAO Report; CATO Institute, New Shipping Fees and Requirements and Requirements Post Fresh Threat to US Economy, May 19, 2025; Costas Paris, *Philadelphia shipyard fights again for its life*, WSJ, Apr. 17, 2019.

The U.S. LNG industry stands ready to work with USTR and the Trump Administration on targeted incentives that will effectively revitalize U.S. shipbuilding and combat Chinese maritime influence, supporting the goals of USTR and the Executive Order on Restoring American's Maritime Dominance, while avoiding impacts to the competitiveness of the U.S. LNG industry and maintaining U.S. energy dominance.

Respectfully submitted,

Dustin Meyer
Senior Vice President
Policy, Economics and Regulatory Affairs
American Petroleum Institute
200 Massachusetts Avenue, N.W.
Suite 1100
Washington, D.C. 20001
meyerd@api.org

Charlie Riedl
Executive Director
The Center for LNG
900 17th Street, N.W.
Suite 500
Washington, D.C. 20006
charlie.riedl@ngsa.org

# 10. APPENDIX

# Section 301: LNG Impact Analysis

April 2025

## Can US shipbuilding rise to the challenge?

# Latest Update:

**18th April: USTR Greer issues guidance on proposed section 301 measures following public consultation**

- As a result, outlined policy has softened versus originally proposed measures, however the situation for LNG is more complex than other sectors.

**Key Points:**

- LNGCs will not be subject to a net tonnage-based fee, unlike other sectors.
- Fleet composition penalties have been dropped – Owners will not be penalized for Chinese built vessels in their fleet.
- Regulations covering the LNGC sector are based on Annex IV of the report found here

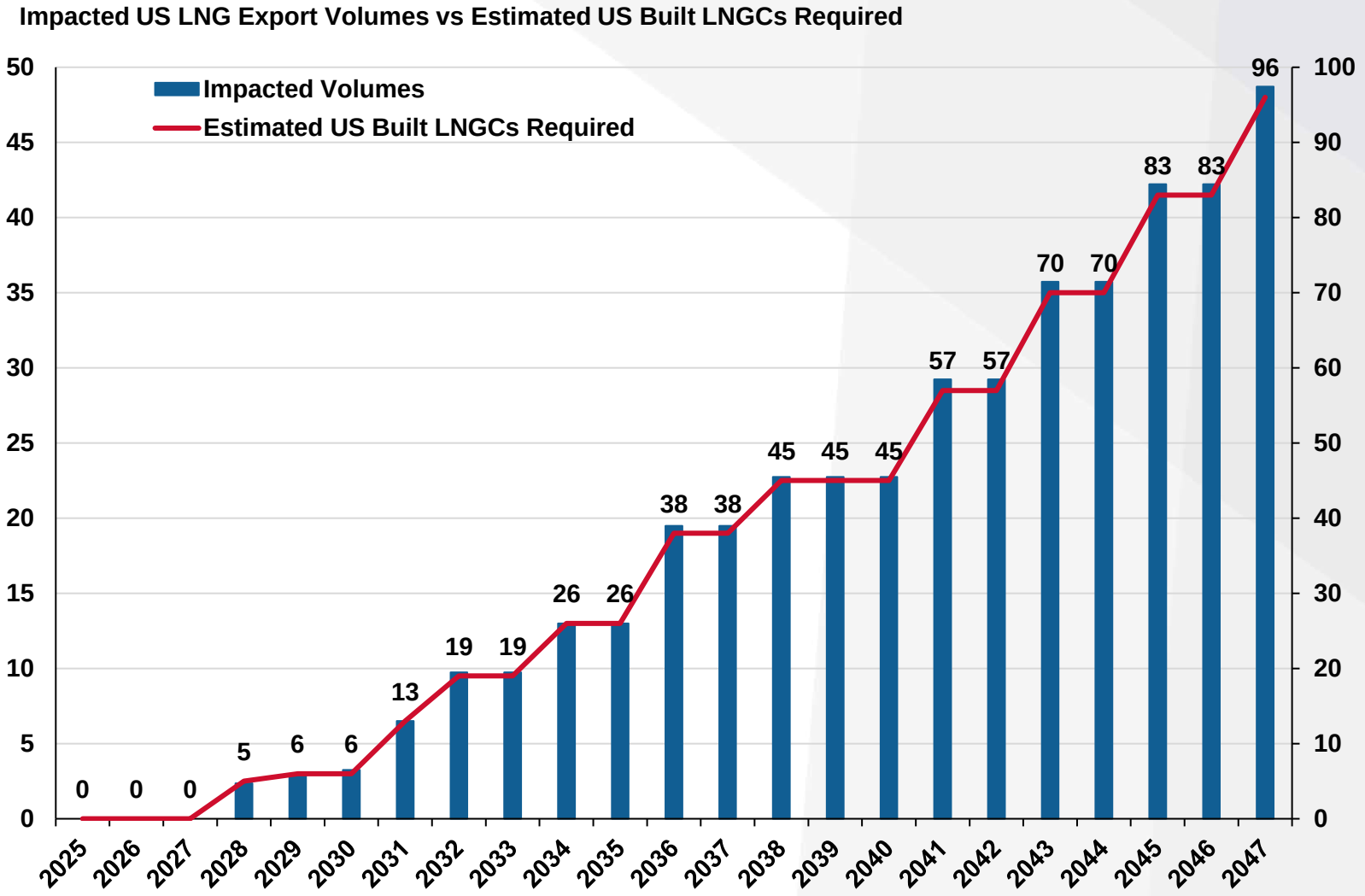
**Essentially:**

- From 2028, 1% of US LNG exports must be shipped on US-flagged and US-operated vessels, with this requirement rising incrementally until a requirement of 15% in 2047.
- The document outlines what constitutes a qualifying vessel, covering both vessel registration, ownership and US built components on board.
- Owners can be exempted for three years by ordering a US built LNGC of equivalent or greater capacity in lieu of a noncompliant vessel. USTR has the right to suspend LNG export licenses if compliance is not sufficient.
- Annual reporting from 2028 to the US DOE is required concerning US LNG exports and compliance with the outlined proposal.
- Further legal clarification is needed regarding the requirements to plan future compliance.

# Compliance will be challenging, adding further difficulties to the US LNG sector

On top of rising US project cost inflation, upward pressure on liquefaction fees and shrinking contribution margins:

- US shipbuilding capacity is unlikely to be capable of building the first batch of US built LNGCs in time.
- Newbuild pricing for US built LNGCs is unknown but could range between $500 million to $1.0 billion per vessel. With vessel quality, technological specification and performance all unknown. This will make US built vessels uncompetitive relative to Korean or Chinese built vessels on a UFC basis and make US LNG less competitive in the global market.
- Manufacturing partnerships with Korean yards will be required and will necessitate technology transfer, but it is unclear if this will be sufficient given disproportionately high US input costs relative to Korea and China.
- From 2028-2030 around 6 vessels will be needed from US yards, with a further 5-6 vessels delivering each year possibly required to meet the requirements of the policy. US shipbuilding could adjust into the 2030s but achieving full compliance this decade appears unlikely.




*Based on export capacity forecasts*

# US shipbuilding capacity overview:

**US Shipbuilding**

US merchant shipbuilding capacity has declined significantly since the imposition of the Jones Act. The bulk of activity in US yards are for Naval contracts.

- Historically, at least 74 yards were active in the US, as of 2025 only 4 yards are active, a 95% reduction.
- When adjusted for non-merchant vessels, there are only 8 vessels on order in the US, 5 of these are container vessels (63% of the US merchant vessel orderbook)

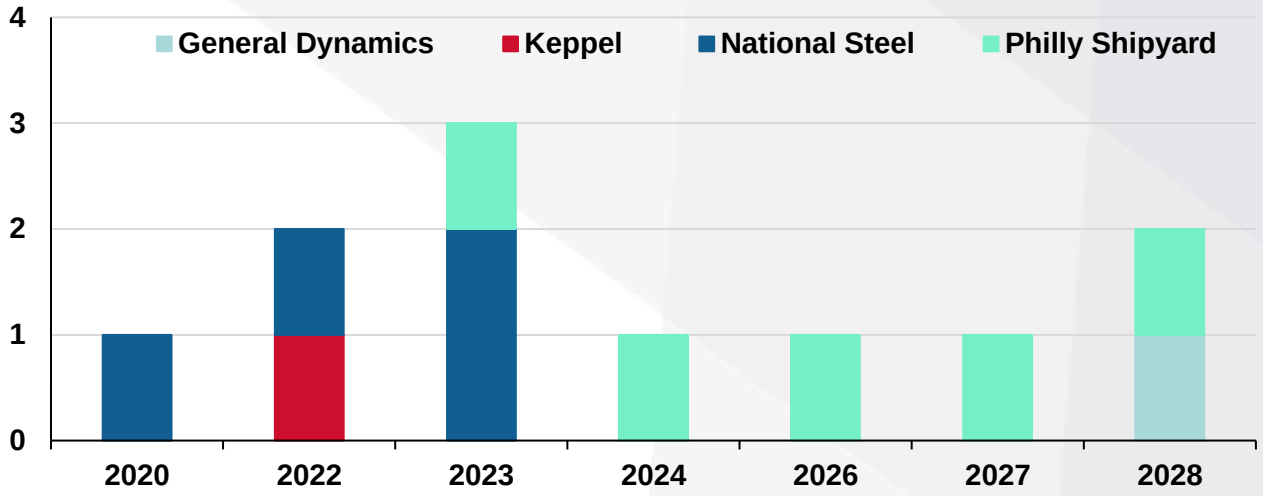
It is clear, the US does not have the yard capacity, technical capability or supply chains to significantly ramp up shipbuilding in line with what would be sufficient to meet the requirements of section 301 in the short to medium term and will remain challenging even in the long term.

The US also lacks the crew training and commercial incentives to make either US shipbuilding or reflagging attractive compared to present trends.

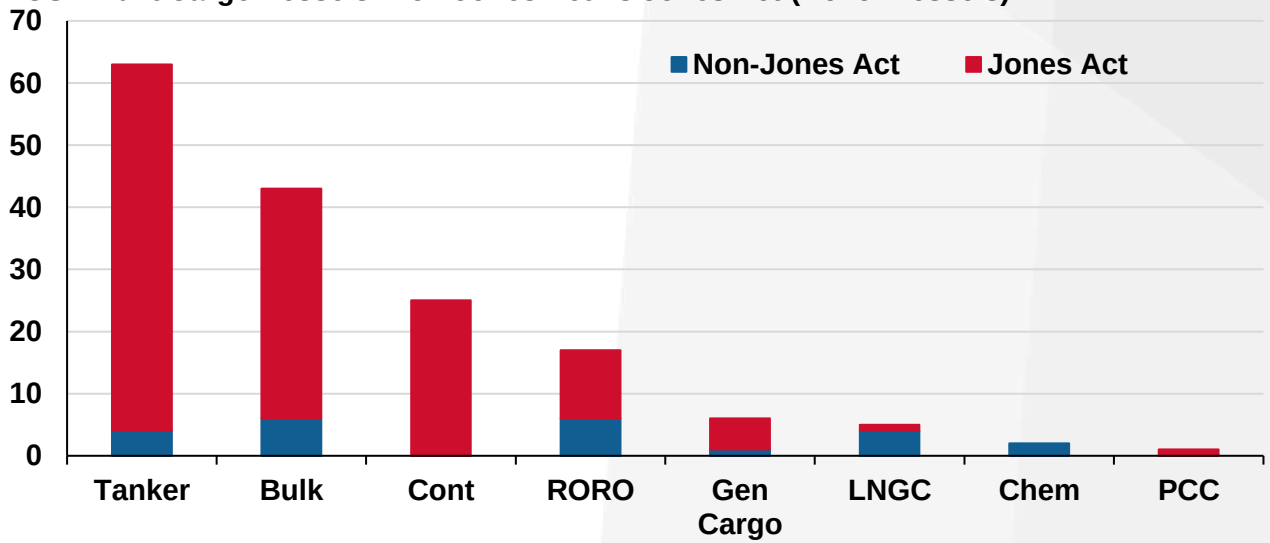
**The US was briefly involved in LNGC construction:**

- Between 1977 and 1979, General Dynamics built 6 LNGCs at the Quincy yard. (126k cbm, ST, Moss).
- 2 of these vessels have since been demolished while the others have undergone conversion work or are under long term layup.
- Newport News also built an LNGC in 1979 but has also since been demolished

**US Shipbuilding: Recent Deliveries vs Current Orderbook (No. of Vessels)**




**USA Built Cargo Vessels: Non Jones Act vs Jones Act (No. of Vessels)**



# How long could it take to establish US LNGC capacity?

Bringing US yards to a level of capability in the LNG sector will take time, requiring significant investment and development.

**Stage 1: Infrastructure Upgrades (1-3 Years)**

- Dry docks, crane systems, steel cutting facilities, cryogenic systems and supporting infrastructure must all be upgraded.

**Stage 2: Workforce Training (1-2 Years)**

- Workers must be hired and trained including on containment systems. +3000 workers for LNGC newbuilding required.

**Stage 3: Licencing & Technological Transfer (1-2 Years)**

- GTT licencing is complex, tightly controlled and expensive.

**Stage 4: Regulatory Certification (Concurrent with prev. Stages)**

- Federal and classification society approvals required.

**Stage 5: First Vessel Construction (2-3 Years)**

- First batch of vessels likely to take longer and requires greater quality control processes.

**Sector Development Timeline:**

**2025/2026**

**Stage 1,2,3,4: Upgrading and Capacity Building Estimated Costs:**

- Infrastructure Upgrades: **$800m-$1.5b**
- Workforce Training: **$200m-$400m**
- Licensing & Tech Transfer: **$100m-$300m**
- Regulatory Certification: **$100m-$200m**

**Total Cost: $1.2b-$2.4b**

**2028/2029**

**Time: 3 Years**

**Stage 5: Vessel Construction:**

**Total Cost: $500m-$1.0b**

**2030/2031**

**Time: 2-3 Years**

**Total Cost: $1.7b-$3.4b**

**Total Time: 5-6 Years**

**Capacity Ramp Up: 2031/2032 (at the earliest)**

*Based on typical yard construction and upgrade procedures, costs adjusted for US*

# Reports that Philly Shipyard is gearing up to build LNGCs?

- Reports have emerged that Philly Shipyard (controlled by Hanwha Ocean) is now in the process of establishing the capacity and supply chains to build LNGCs in the US.
- While this would appear positive given Hanwha's extensive experience in LNGC construction and the potential for significant technology transfer; this is likely not feasible inline with the requirements of section 301.
- As shown by the table on the right, in both the low and high cases of potential US newbuild pricing, the economics are unfavourable compared to Korean built tonnage.
- Both the required BB and TC rate over 10 years to generate a 10% equity yield are significantly higher than that required for a Korean built vessel.
- This corresponds to exceptionally high UFCs for both USG/Europe trade and longer haul USG/Far East trade. If vessels are priced according to the high case scenario, these vessels are likely to be untradable longer haul and only tradable short haul during periods of exceptionally firm European gas pricing to offset this higher freight cost.

| Newbuild Economics Comparison | Korean Built | US Built - Low Case | US Built - High Case |
|---|---|---|---|
| Newbuild Price | $ 250,000,000 | $ 500,000,000 | $ 1,000,000,000 |
| **Required Hire Rates for 10% Equity Yield** | | | |
| BB Rate | $ 81,620 | $ 161,405 | $ 326,777 |
| TC Rate | $ 99,690 | $ 179,470 | $ 344,840 |
| **Implied UFCs ($/MMBtu)** | | | |
| **BB Rate** | | | |
| Sabine/Isle of Grain RV | $ 1.05 | $ 1.65 | $ 2.90 |
| Sabine/Tokyo via COGH RV | $ 2.92 | $ 4.78 | $ 8.63 |
| **TC Rate** | | | |
| Sabine/Isle of Grain RV | $ 1.19 | $ 1.79 | $ 3.04 |
| Sabine/Tokyo via COGH RV | $ 3.34 | $ 5.20 | $ 9.05 |

*Based on round voyage economics*

# Potential impact on US LNG exports

**Added Complexity:**

- Future tonnage procurement strategies will need to consider the need to have access to a growing pool of US built LNGCs which will undoubtedly make this a more complex and expensive task. Thus far it is not uncertain how this will be structured or who will provide the service.

**Added Costs:**

- Liquefaction fees will have to rise to factor in the higher cost of shipping US cargoes on US built vessels. This will be negative for contribution margins and could make some projects uneconomical if end users are not willing to pay these higher costs.

**Less Competitive:**

- With US LNG becoming higher cost versus other producers and growing competition from the Middle East and Pacific producers such as Canada and Mexico for future Asian demand, more US LNG is likely to head to Europe.

- However, it is not clear Europe either has the capacity or the longer-term demand to import the large volume of upcoming US LNG supply. This is especially pertinent given the continued rise in European renewables production and EU methane regulations (although these may be reduced to accommodate US LNG).

- We are likely to see LNG end users seek to diversify their supply away from the USG and Henry Hub indexing to avoid excessive exposure to US cost pressure and market dynamics.

- This could place US LNG projects in a very difficult commercial position, especially heading into the next decade where European demand is likely to decrease, and US molecules could be priced out of Asian markets unless there is a reversal in longer term forecasts for pricing in Asia.

Gibson

www.gibsons.co.uk


**London**
12th Floor
6 New Street Square
London EC4A 3BF

**T** +44 (0) 20 7667 1000
**F** +44 (0) 20 7430 1253
**E** research@eagibson.co.uk

**Hong Kong**
Room 1401, 14/F,
OfficePlus @Wan Chai,
303 Hennessy Road.
Wanchai. Hong Kong.

**T** (852) 2511 8919
**F** (852) 2511 8901

**Singapore**
2 Battery Road #09-01,
Maybank Tower
Singapore 049907

**T** (65) 6590 0220
**F** (65) 6222 2705

**Athens**
Regus office 101,
Grigoriou Lampraki 58,
Glifada,16675, Greece

**T** +30 21 1198 2391

**Houston**
770 South Post Oak Lane
Suite 610, Houston
TX77056 United States

**Dubai**
JBC 1 Unit # 2204 JLT,
Jumeirah Lakes Towers,
Dubai, United Arab Emirates

**Mumbai**
B 1006, 10th Floor,
Kohinoor Square plot No. 46,
N C Kelkar Marg, Opp Shivsena
Bhavan, Dadar (W) Mumbai -
400028 Maharahstra, India

# LNG CARRIER 101 AND U.S. SHIP BUILDING CHALLENGES

## COMPLIANCE WITH USTR'S REMEDIES IS NOT POSSIBLE:

There are currently no U.S.-made or enough U.S.-flagged vessels capable of exporting the quantity of LNG necessary to support current or increased U.S. LNG exports.

- The U.S. does not have the shipyard capacity, technical capability or supply chains to significantly ramp up shipbuilding of U.S. LNG carriers to meet the U.S. Trade Representative (USTR) requirements.
- The U.S. currently lacks the highly specialized and skilled crews for the operation and maintenance of LNG ships.

South Korea is the largest LNG Carrier (LNGC) ship builder in the world. Since 2018, 80% of the LNG vessels delivered or ordered have been or will be constructed in Korean yards. Meanwhile, 18% have been or will be constructed in Chinese yards. These countries' ability to excel in the shipbuilding industry is due to their respective government's monetary investments in the industry.[1]

**2024 total of U.S. exports in Bcf:** **4,365**

**2024 total of U.S. LNG cargoes:** **1396**

**Number of LNGC on the water currently:** **792**[2]

**Number of LNGC in order book:** **536**

## CURRENT U.S. BUILT LNG BUNKER BARGES:

### 1. CLEAN JACKSONVILLE

**Capacity:** 2,200 cubic meters
**Dimensions:** 232 ft x 68 ft x 34 ft

### 2. PROGRESS

**Capacity:** 12,000 cubic meters
**Dimensions:** 416 ft x 68 ft x 38 ft

*Bunker Barges are used for marine refueling*

### TYPICAL LNG CARRIER:

**Capacity:** 174,000 cubic meters
**Dimensions:** 967 ft x 152 ft x 41 ft

### TYPICAL NIMITZ-CLASS AIRCRAFT CARRIER

**Dimensions:** 1,092 ft x 252 ft x 37 ft

*LNG Carriers are used to transport LNG long distances*

### HANWHA PHILLY SHIPYARD, PA:

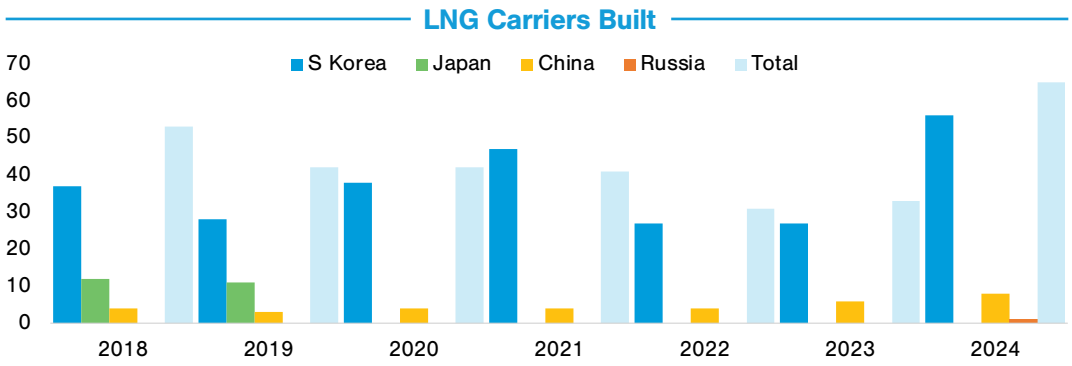
**Dimensions:** 1,120 ft x 150 ft

### SAMSUNG HEAVY INDUSTRIES SHIPYARD, SK:

**Dimensions:** 2,118 ft x 328 ft

[1] USTR, Report on China's Targeting of the Maritime, Logistics, and Shipbuilding Sectors for Dominance – January 16, 2025; and see, https://maritime-executive.com/article/korean-government-pledges-financial-and-r-d-support-for-shipbuilders
[2] https://www.reuters.com/business/energy/us-energy-companies-seek-exemption-trump-plan-move-lng-us-built-ships-2025-05-07/

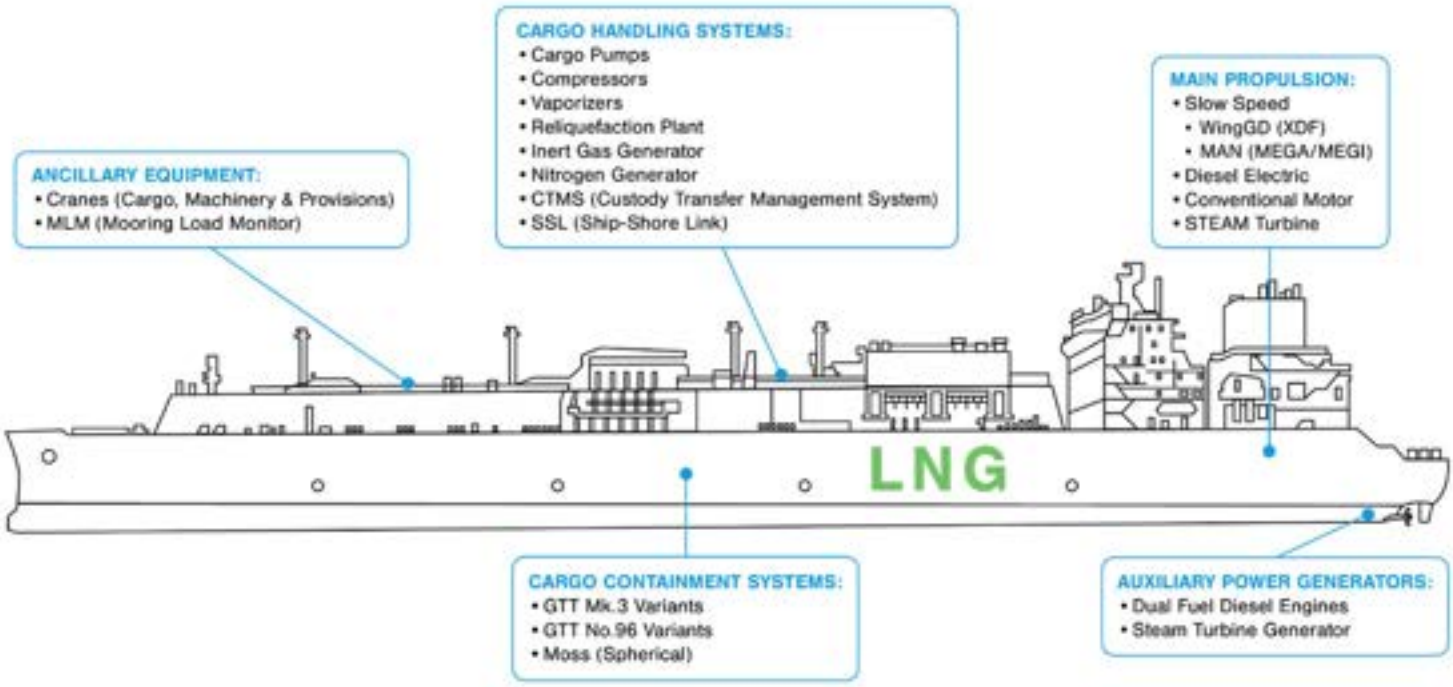
center for LNG

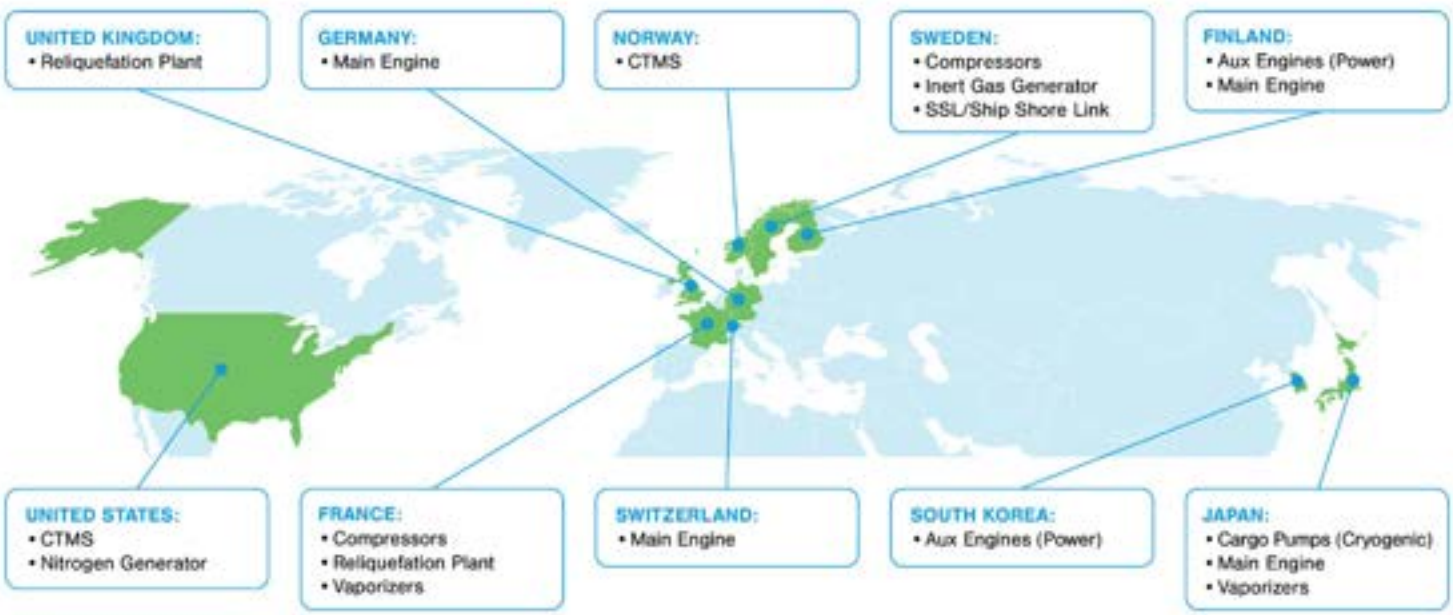




*Source: Wood Mackenzie*

## LNG VESSEL COMPONENTS ARE GLOBALLY SOURCED*:




**Vendor's supply chains may include other countries where they might be headquartered. Production may be in other countries and can be licensed to other companies.*

# Shipyard comparison: Geoje (SK) vs. Philadelphia


**Samsung Heavy Industries Shipyard Geoje, South Korea**


**Hanwha Philly Shipyard, PA**

Hanwha's 200th LNG tanker launched in 2024, "*Lebrethah*", is 295m long and 47m wide. It would not fit into the Philly shipyard.