

LNG Shipping: The New Gold Rush?

The economics of LNG carriers amid the global energy shift

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Introduction

An LNG carrier is a vessel specifically designed to trade and transport liquefied natural gas (LNG). Methane, CH_4 , when mixed with ethane C_2H_6 are all natural gases. The exponential growth of liquefied natural gas (LNG) production is often referred to as a modern gold rush. But is it hype or grounded in economic reality? Or even if it was grounded in 2020, is the gold bubble close to bursting?

The capacity of these ships range between 125,000 cum to 260,000 cum.

In the past decades a significant rise of LNG in the global energy mix has been observed. In 2000, LNG accounted for 26% of natural gas trade while, in 2020, this share has risen to 45%. Shell's experts have come forward and



commented on this upward trend with Tom Summers, Shell's senior vice president for LNG marketing and trading saying: 'Upgraded forecasts show that the world will need more gas for power generation, heating and cooling, industry and transport to meet development and decarbonization goals'. In more quantitative terms, according to Shell's experts, Global demand for liquefied natural gas is estimated to rise by around 60% by 2040, driven largely by economic growth in Asia.

The Economics of LNG Carriers

LNG Carriers are characterized by high capital costs and long Lead times. In more detail, the cost of building an LNG carrier, ranges between 230-250\$ million and construction time is estimated to be around 30 months. The market for LNG shipping operates under two main models, the spot market and long-term charters. Spot trading rates peaked at over \$450,000 per day during the 2022 energy crisis and were later normalized around \$100,000-150,000 per day. This evident volatility leads many operators to opt for long term contracts, which although limit extreme profits, they provide higher stability amid market swings. The Global energy transition has been named as the main favoring source of LNG as a cleaner alternative to coal and oil. Asia, and especially China, South Korea, and India are the drivers of the LNG rise, while Europe's pivoting from Russian pipeline gas has also boosted LNG imports, especially post-2022.

Operation costs of LNG carriers are however a hard pill to swallow. The need for specialized crew, the high maintenance costs and fuel consumption are sometimes driving the costs too high up. There have however been some attempts to improve efficiency like dual-fuel

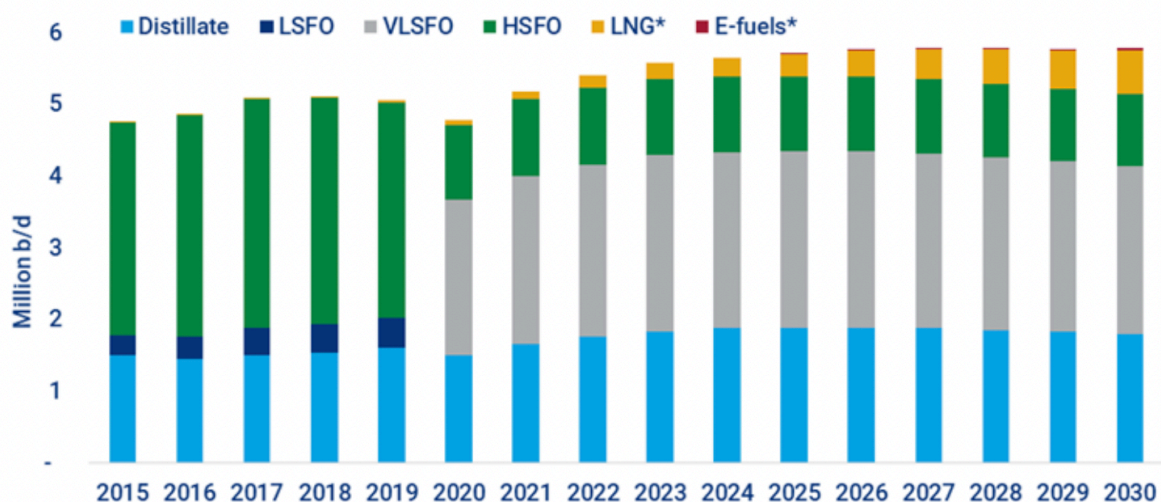
propulsion systems and boil-off gas (BOS) management which were successful to an extent. Additionally, Newer vessels use **ME-GI** and **X-DF** propulsion systems and are hence equipped to reliquefy evaporated gas, lowering emissions and operating costs.

Investment Trends: Who's Fueling the Boom?

The surge in demand for LNG has triggered a wave of investment in LNG carriers, with newbuild orders reaching record levels. Since 2022, shipyards in South Korea and China have been overwhelmed with orders, securing contracts years in advance. QatarEnergy has placed massive orders for LNG vessels to support its expansion plans, while Chinese state-backed firms are also ramping up investments to secure their supply chains. Beyond state players, private equity firms and institutional investors have recognized the high return potential of LNG shipping. Major financial groups are backing fleet expansions, seeing LNG as a crucial part of the energy transition. However, this investment rush is not without contradictions. While LNG is promoted as a “transition fuel,” long-term green commitments and regulatory pressures could challenge its profitability in the future. Investors must balance short-term gains with the uncertainty of future energy policies.

Marine LNG is the main source of marine fuel growth in the next decade

Volume of global marine bunkers (international and domestic) 2015-2030



Source: Wood Mackenzie. * Volume of oil displaced by LNG and e-fuels in international and domestic shipping

Profitability vs. Crude and Dry Bulk

LNG shipping has emerged as one of the most profitable segments in maritime transport. Compared to crude tankers and dry bulk carriers, LNG vessels command significantly higher daily charter rates, often exceeding \$150,000 per day in peak markets, while crude tankers average around \$30,000 to \$50,000 per day. Utilization rates are also higher for LNG carriers, as demand remains strong throughout the year, driven by long-term contracts and strategic government-backed agreements. While seasonal volatility impacts all shipping markets, LNG offers unique arbitrage opportunities, with traders leveraging price differences between regions. However, LNG shipping is not without risks. Geopolitical chokepoints, such as the

Suez and Panama Canals, pose threats to supply routes, and disruptions could impact profitability. Additionally, while LNG shipping is currently in high demand, its long-term advantage remains uncertain. The war in Ukraine accelerated Europe's shift to LNG, but as the energy crisis stabilizes and investments in renewables grow, the sustainability of LNG's dominance could be challenged. Will LNG remain the preferred transition fuel, or will emerging technologies and stricter environmental regulations push it aside?

Conclusion

LNG shipping is lucrative but not without risks. The surge in demand has driven record-high freight rates and investment, but long-term sustainability remains uncertain. Is this a gold rush, or a strategic bet on the energy transition? The relaxation of tensions between the EU and Russia could reduce Europe's reliance on LNG imports, softening demand and freight rates. Additionally, as renewables gain traction, LNG's role as a transitional fuel may be challenged. The race is on—but not everyone striking gas will strike gold.