Richardson Lawrie Associates Ltd
a Wade Maritime Group Company

Special topic
VLGC Carrier Market

Special Report
01
April 2025

Navigating Volatility: China's LPG Market Faces Pressure from PDH Recovery and US Trade Tariffs"

China's LPG market is navigating a complex and evolving landscape, shaped by robust industrial demand, recent improved PDH margins in the first quarter of 2025, and heightened US-China trade tensions. While positive production economics are fuelling short-term buying interest, the long-term sustainability of China's current LPG sourcing strategy is increasingly under question.

PDH Margin Recovery Spurs Short-Term Demand

The premium on propane cargo deliveries to China over northeast Asian paper prices in April climbed to a 10-month high, fuelled by robust purchasing activity from PDH operators. Chinese PDH margins turned positive from February to mid-March, averaging just above $1/tonne, a sharp recovery from –$4/tonne in the final quarter of 2024 and -$14/tonne for the full year.

Initially, the improved margins failed to immediately translate into increased propane imports due to the Lunar New Year holiday and ongoing caution linked to U.S.-China trade tensions. However, sentiment improved notably after Beijing's earlier retaliatory tariffs excluded LPG, prompting Chinese buyers to re-enter the spot market. Additionally, a drop in crude prices—reflected in the Argus Far East Index (AFEI)—further supported propane purchasing as PDH product sales (propylene and polypropylene) remained fixed-price, improving netbacks.

Robust US Export Volumes but Mounting Trade Risk

U.S. propane exports remained strong, with 4.55 million tonnes in March and 4.0 million tonnes in February, slightly above the six-month average of 4.42 million tonnes/month, according to EIA. China's propane demand is expected to remain firm, supported by the government's 5% GDP growth target and signs of a manufacturing rebound—the February PMI rose to 50.2, up from 49.1 in January.

However, the outlook has become increasingly uncertain amid rising trade tensions. In response to the U.S. "Liberation Day" announcement—during which President Donald Trump unveiled sweeping global tariffs, including duties on Chinese imports reaching up to 54 percent—China's State Council Tariff Commission condemned the move as a violation of international trade norms. It subsequently announced a 34 percent retaliatory tariff on U.S. imports, effective 10 April 2025. The Commission also indicated that certain U.S. imports would be banned, and export controls would be imposed on critical natural resources. In response, on 08 April, the White House announced that an additional 50 percent tariff on Chinese goods would take effect just after midnight on 10 April in Washington. This measure, combined with previously announced "reciprocal" tariffs and other levies, raised the total duties on Chinese imports to over 104 percent.

Importantly, LPG has now been included in the list of affected commodities, placing a major question mark over the future of US-China energy trade. The imposition of these levies raises significant concerns around supply reliability and pricing dynamics, especially given China's substantial share of the U.S. trade deficit—30%. From a shipping standpoint, the implications are substantial: 13% of global VLGC trade flows currently move from the U.S. to China, making LPG the most directly exposed segment in this latest round of trade action.

Traders have grown increasingly cautious, with May propane cargo discussions for Ningbo starting in the low $20s/tonnes above May AFEI swaps. But rising outright prices have begun to erode profitability—PDH margins fell to –$35/tonnes by the final week of March, dampening forward buying appetite.

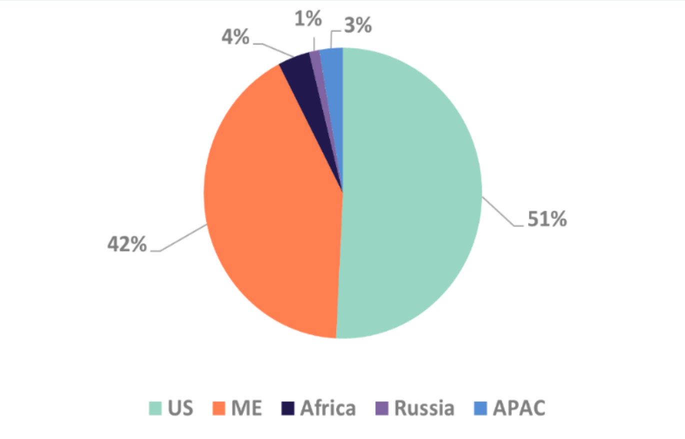
Structural Risks in China's Import Strategy

In 2024, China imported 35 million tonnes of LPG, of which:

- 17 million tonnes (51%) came from the United States
- 14 million tonnes (42%) from the Middle East

- 1.4 million tonnes (4%) from Africa, with the balance from smaller suppliers

Figure 1 China import in 2024



The current structure highlights China's heavy reliance on US, LPG. Should Beijing move to reduce this dependency, the Middle East emerges as the logical replacement. However, the Middle East's export capacity—although robust at 45–50 million tonnes annually—is already heavily committed to other major Asian markets such as India, Japan, and Southeast Asia.

We believe the Middle East could potentially redirect an additional 2–4 million tonnes of LPG to China in the short term, with further volumes possibly sourced from countries like Iran. However, a complete replacement of U.S. supply remains unlikely without causing disruptions to existing contracts and infrastructure.

Feedstock Inflation and Margin Pressure Pose New Risks

As China continues to navigate an increasingly uncertain trade environment, the risk of sustained higher propane prices poses a significant challenge to the economic viability of PDH operations. With LPG—now officially included in China's retaliatory tariff list—subject to additional costs, the margin cushion previously enjoyed by PDH plants has begun to erode. Rising feedstock costs not only threaten to compress PDH profitability but are also expected to cascade downstream, pushing up the cost of propylene and polypropylene (PP).

Given that PP pricing in China is largely contract-based and often fixed at the point of sale, operators may face reduced arbitrage opportunities and weaker netbacks. This margin squeeze could lead to lower operating rates at PDH facilities, a deceleration in new project investments, and ultimately, restrained demand growth in downstream sectors that rely heavily on competitively priced PP.

Over the medium term, China's dependence on U.S. feedstocks—including propane, butane, and ethane—presents a strategic vulnerability. The volatility induced by trade policy shifts underscores the need for China to diversify its sourcing, renegotiate term contracts for greater flexibility, and accelerate investments in alternative or domestic feedstocks

In the months ahead, market participants should monitor evolving trade policies, LPG pricing trends, and PDH margin indicators closely. A sustained rise in feedstock costs—combined with logistical constraints and trade frictions—could reshape the economics of polypropylene production in China and weigh on broader petrochemical supply chains in the Asia-Pacific region.

Looking Ahead, while China's near-term LPG demand remains strong—fuelled by industrial recovery, policy-driven growth targets, and temporarily improved PDH margins in the first quarter of 2025—its medium- to long-term import strategy is vulnerable to geopolitical shifts. As LPG now becomes a target in rounds of tariffs, supply diversification, contract flexibility, and investment in alternative feedstocks will be essential. Given China's reliance on U.S. propane, butane, and ethane, higher feedstock costs could squeeze PDH margins, leading to increased propylene and polypropylene (PP) prices and potentially curbing their demand.

The coming months will be pivotal. Market participants are watching closely for further developments in U.S.-China trade policy and how they may affect LPG flows, pricing, and PDH economics in one of the world's largest consuming markets.

SHORT TERM OUTLOOK – OIL TANKER MARKET

A monthly report covering the next four months including trends in oil supply, demand and trade, tanker demand and supply, spot, and time charter rates for MRs up to VLCCs, comparisons with FFAs plus the latest news on developments impacting the oil and tanker sectors.

MEDIUM TERM OUTLOOK – OIL TANKER MARKET

Concise analyses of topical issues, consistent market data series and views on future trends in tanker charter rates. The report covers Oil Prices; Economic Developments; Oil Demand and Supply; Trade; Tanker Demand, Supply and Rates. Sent to clients around January, April, July, and October each year

SHORT TERM OUTLOOK – VLGC MARKET

A monthly report looking four months ahead at likely trends in the VLGC Spot Market with the latest on key LPG carrier trades, benchmark LPG prices, arbitrage developments, a comparison with FFAs and recent news

MEDIUM TERM OUTLOOK – LPG CARRIER MARKET

A quarterly series of regular reviews, analyses, and forecasts of the LPG Carrier Market. The report covers Economic Developments; LPG production, consumption, and pricing; LPG, chemical gases and ammonia trade, LPG Carrier Demand, Supply and Rates for Fully Ref, Semi-Ref and Pressurised Ships. Reports sent to clients around January, April, July, and October each year.

CHEMICAL CARRIER WORLD SERVICE

An annual consultancy service currently providing Clients with an Annual Fundamentals Report, a Forecast Update, two quarterly Market Monitors, Monthly Commodity Trade Bulletins for key countries, an annual presentation on the market outlook and access to RLA's consultant's and analysts to discuss issues arising from these reports.

WADE MARITIME GROUP

SINGAPORE OFFICE
10 Anson Road
#10-11 International Plaza
SINGAPORE 079903
T: +65-6950 7561

LONDON OFFICE
Terminal House
52 Grosvenor Gardens
London, UK SW1W 0AU
T: +44-20-3386 9413

INDIA OFFICE
SCO 10, First Floor
Sector - 79, Mohali,
Punjab, INDIA 140308
T: +91-172-4105887

E: info@wademaritime.com | research@richardsonlawrie.com