V5AI LNG Supply Momentum Index™
Fixed Capital, Broken Corridors, Calibrating Investment Options

ENERGY INTELLIGENCE · JUNE 2026

V5AI LNG SMI™ = *f* (Volume fraction, Delivery cost)

WHAT IT MEASURES

The LNG Supply Network is built around infrastructure of liquefaction trains, shipping, and regasification terminals, with long-term contracts underpinning cost structures and design utilization. That is the equilibrium into which new volumes enter the market. **LNG SMI measures how far the system is operating from that equilibrium.**
Index 100 = contracted and spot volumes flowing on designed corridors at designed utilization.

VOLUME FRACTION

Driven by the physical infrastructure chain (liquefaction, LNG carriers, regasification) – all choices are multi-year execution commitments and high capital. **Contracts underpin capital** – 65% long-term take-or-pay, trending toward spot. **Liquefaction** locks in supply. **Regasification and vessel size** reflect locked-in contracted corridor economics.

DELIVERY COST

Charter rate – dominant variable, falls as route utilization builds. **Boil-off rate and gas management** set by vessel design and insulation technology – a capital decision that constrains operational flexibility. **Canal transits** (Suez, Panama) optimize supply chains but expose them to geopolitical and climate risk.

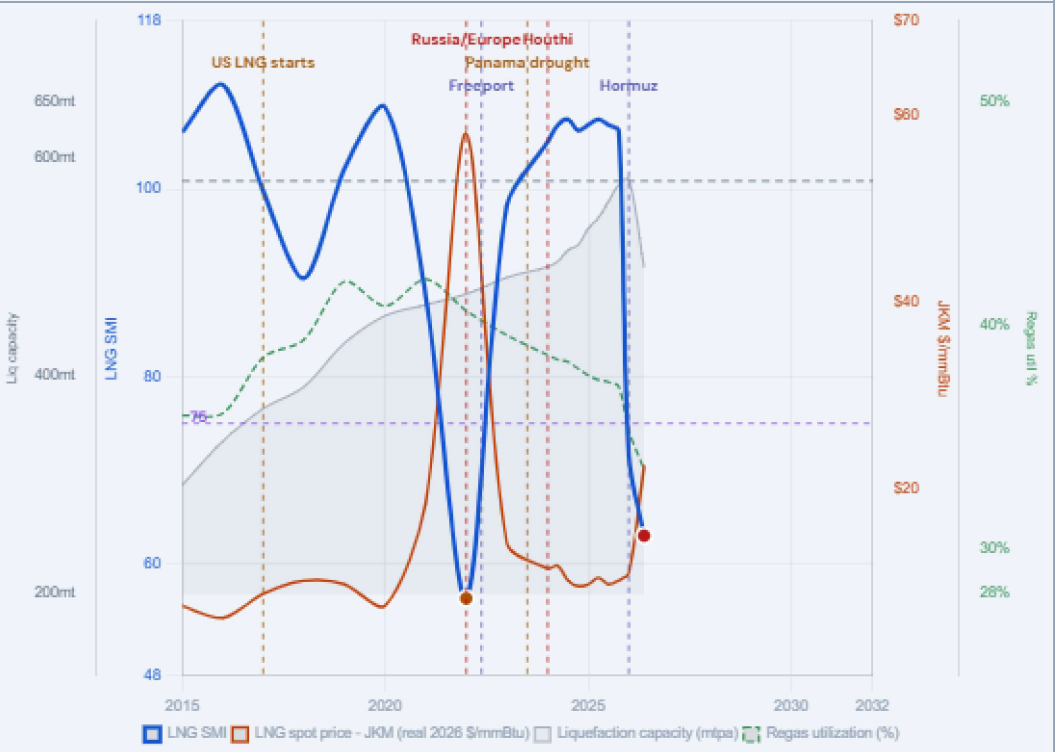
INTERPRETATION

SMI 100 = $0.17/mmBtu per 1,000nm.
SMI 63 = $0.27/mmBtu per 1,000nm – 59% above equilibrium.
1 point loss = $0.002/mmBtu per 1,000nm above the contracted system design.

V5AI LNG Supply Momentum Index™ · V5AI Advisors, Energy & Industry Practice

LNG SMI 2015-2026 · CONTRACTED EQUILIBRIUM FRAMEWORK

LNG SMI (blue, left) · JKM spot price (burnt orange, right) · liquefaction capacity and regas utilization overlaid · purple dashed = SMI 75



VALUE CHAIN CASCADE · LIQUEFACTION → TRANSPORTATION → REGASIFICATION

Each infrastructure layer locks in the next

LIQUEFACTION

140 mtpa

under construction, start-up 2027–30

100 mtpa at FID in 2026 – 75 mtpa US alone. Capacity reaching 550–600 mtpa by 2028. Fiscals dictate train size and storage. Tolling gives route optionality; FOB (seller delivers at load port, buyer owns corridor) locks both in.
SMI impact: stranded FOB volumes = contracted capacity not executing. 78% of the current SMI fall. Tolling sellers redirect, limiting destruction. Tight storage prolongs displacement costs.

TRANSPORTATION

334 ships on order

40% of current fleet

100+ delivering in 2026 at $200–220M each. Korean yards booked to 2028. Vessel class set by both terminal ends and technology choices for containment and powering. XDF/MEGI earns $15,500/day more than TFDE – only where terminals match.
SMI impact: at SMI 63, cargoes cost 59% more per 1,000nm. 75% of the orderbook is Worldscale-indexed – no mechanism to reprice when the corridor stops.

REGASIFICATION

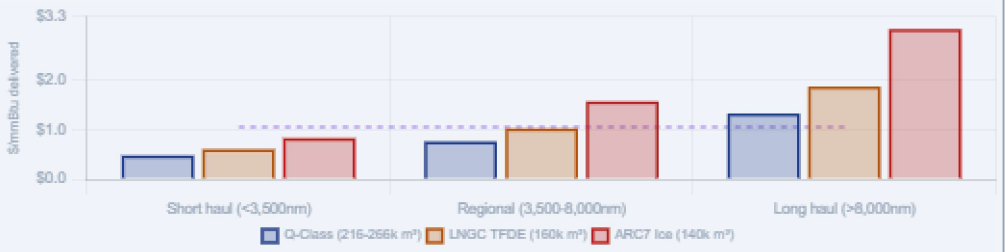
140 Bcf/day

37% utilized across 55 countries

Fixed terminals dominate (71% of capacity); 48 FSRUs provide flexible response. Europe added 5 Bcf/day of regasification capacity since 2022. 33 Bcf/day of new supply arrives 2025–30 – import infrastructure must keep pace.
SMI impact: at SMI 63, spot volumes surge and existing storage is undersized for the new arrival pattern. FSRU throughput (2–3 cargoes/month) binds first.

VOYAGE ECONOMICS · $/MMBTU DELIVERED BY VESSEL TYPE

Purple dashed = system equilibrium $1.06/mmBtu · fixed JKM $10.5/mmBtu



RISK 1 · GEOPOLITICAL

Hormuz + Russia

LNG SMI fell to 63 on Hormuz closure – 89.5 mtpa of contracts not executing. Russia produced the worst reading on record (56.3) in 2022. Yamal sanctioned, Arctic LNG 2 stalled. Two geopolitical disruptions active simultaneously. Each quarter unresolved deepens the structural shift and makes recovery longer.

RISK 2 · CLIMATE

El Niño active

NOAA forecasts El Niño emerging mid-2026, persisting through year-end. Panama Canal Authority: no restrictions forecast through Dec 31, 2026 – that boundary is deliberate. 2023-24 drought cut LNG transits from 36 to 22/day. LNG transits still 73% below pre-drought levels as carriers prefer Cape Horn routing. A concurrent Panama restriction would push LNG SMI further below 63.

FID TIMING · LIQUEFACTION

FID signal

LNG SMI below 75 for 4+ consecutive quarters – buyers experiencing contract execution failure are receptive to new long-term supply on non-disrupted corridors. Atlantic Basin, East Africa, Canadian projects. FID today means first cargo in 5-7 years.

CHARTER STRUCTURE · TRANSPORTATION

Charter signal

LNG SMI below 75 means charter rates indexed to commodity prices no longer reflect actual corridor economics. A rate structure that tracks delivery efficiency rather than market sentiment would price the disruption correctly. That gap between index and reality is where charter negotiations can be influenced – for where the market may be heading.

DEPLOYMENT SIZING · REGASIFICATION

Deployment signal

LNG SMI below 75 means spot cargoes are scarce and above-equilibrium cost. FSRU deployment earns scarcity returns in this environment. Framing the ROI on SMI recovery scenarios, not price sentiment, can yield more dependable outcomes.

Freight model: Poten & Partners LNG Shipping Market Reports, Baltic Exchange BLNG1g/2g/3g, Shell LNG Outlook 2024, GIIGNL Annual Report 2024. LNG spot price (JKM – Japan Korea Marker) fixed at $10.5/mmBtu to isolate route efficiency from commodity price. Volume data: Kpler, Vortexa, IGU. Contracted equilibrium framework: V5AI proprietary methodology.