

X-LNG CASE STUDY · AUG 2024

Origination Under Uncertainty

\$238.4M

base portfolio profit, Sabine Pass to Gate, before the new deals

Australia vs Middle East · 4 FOB cargoes 4 stress tests · full year 2025 Forward curves HH, TTF, JKM, Brent

The base book and two suitors

— Same expanded book, same demand, only the new supply hub differs

THE BASE BOOK, EXPANDED

- **22 Sabine Pass cargoes to Gate:** 115% HH + \$3.5 into 90% TTF
- Plus 4 DES Longs with NWE flex (90% TTF)
- Plus 4 DES Shorts at Sines (85% TTF), 4 at Incheon (100% JKM)
- Fleet: 2 × 174K vessels + 1 TC-in

THE TWO SUITORS · 4 FOB CARGOES EACH

- **Option A: North West Shelf**, Australia, 94.5% JKM minus \$3.75
- **Option B: Das Island**, Middle East, 11% Brent
- Base portfolio worth **\$238,435,281** before either deal

At the curve, a near tie

— First-sight P&L says the choice barely matters; the stress tests say otherwise

PORTFOLIO P&L WITH NEW DEALS · FORWARD CURVES



Exact engine results: Australia \$273,208,244 · Middle East \$268,032,172 · base \$238,435,281.

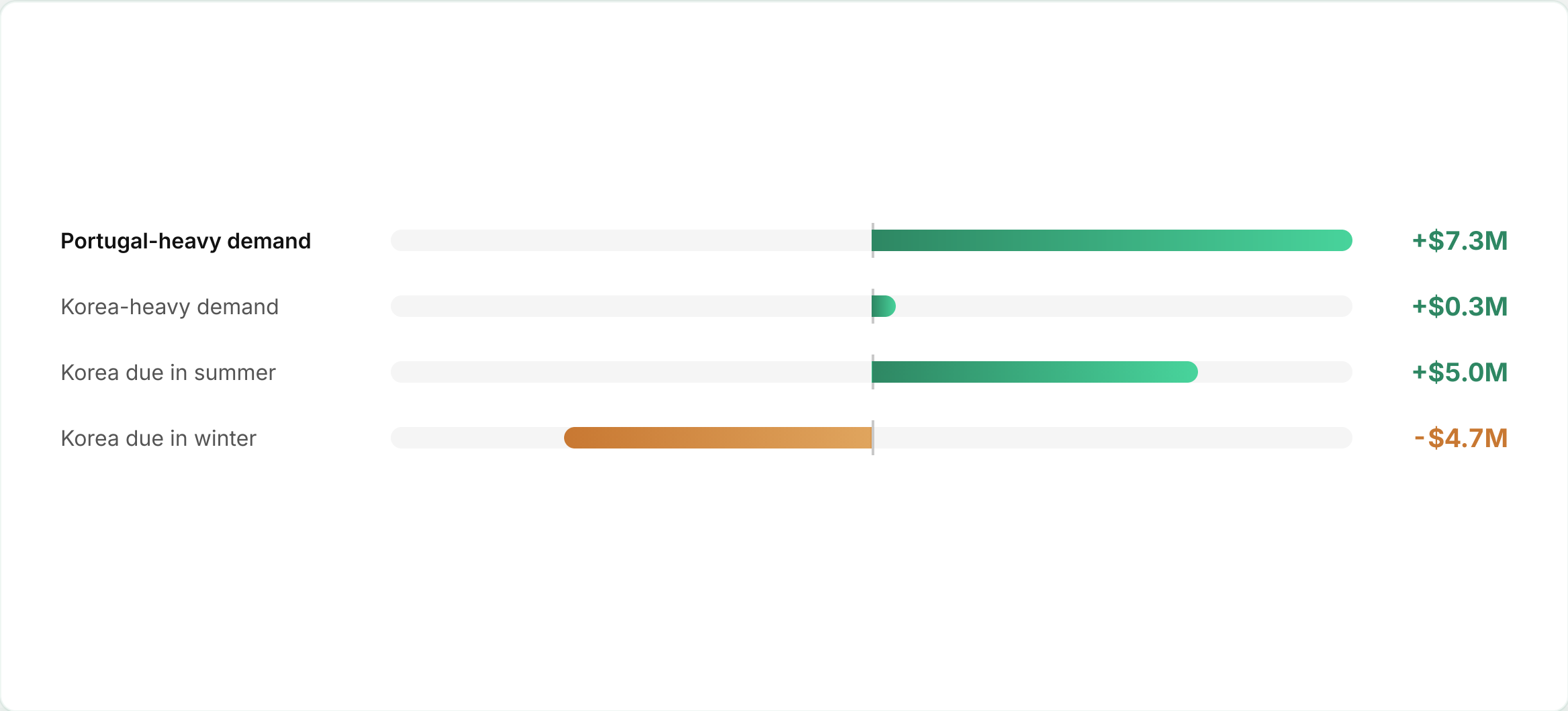
Four stress tests

Demand skews, a Red Sea closure, seasonal spreads, index volatility

01

Demand skews pick Australia

— Australia's edge over the Middle East, per scenario; only the winter flips the sign



Demand skews as 6-vs-2 cargo splits. Exact engine results: Portugal-heavy \$256,738,177 vs \$249,420,655 · Korea-heavy \$287,963,212 vs \$287,620,889 · summer \$245,019,585 vs \$240,060,053 · winter \$244,024,551 vs \$248,678,414.

The Red Sea closure taxes Europe

— The eastern supply reroutes around the Cape whenever Europe is the heavy side

-\$4.6M

Australian book



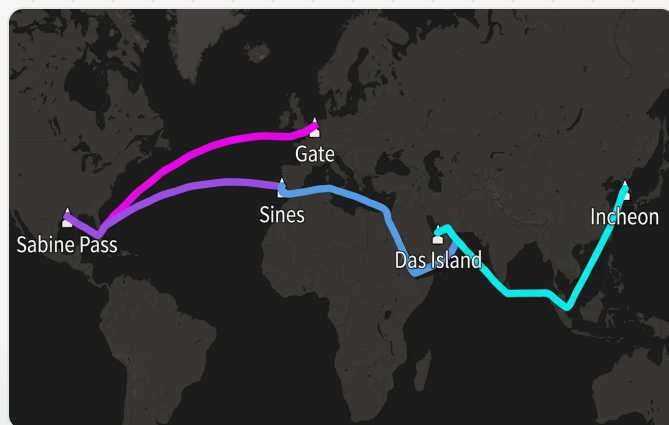
AUSTRALIA · OPEN · \$256,738,177

-\$3.9M

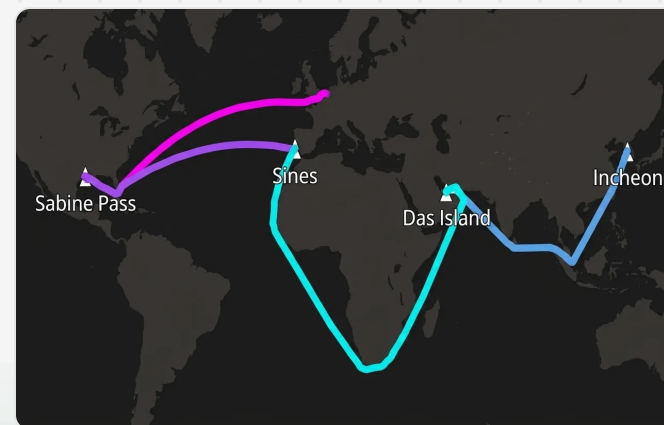
Middle East book



AUSTRALIA · CLOSED · \$252,169,435



MIDDLE EAST · OPEN · \$249,420,655



MIDDLE EAST · CLOSED · \$245,474,549

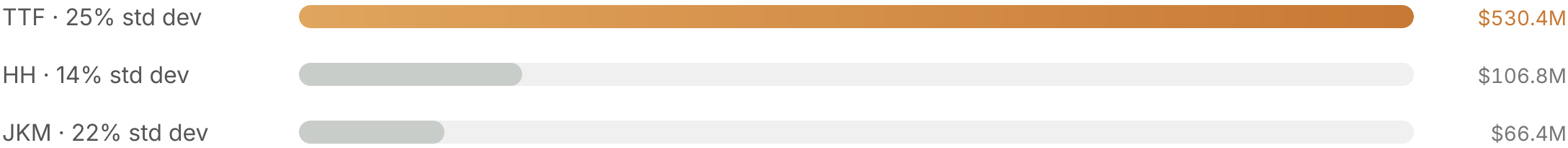
Europe

the hit lands on the Europe-heavy split

One index towers over the rest

— Portfolio profit range for a one-standard-deviation move, per index

PORTFOLIO PROFIT RANGE · \$M · STD DEVS YTD



JKM exposure is naturally hedged: a similar number of cargoes is bought on JKM-netback terms (Australia) as is sold on JKM (Korea). Profit range = one std dev above vs below the optimised valuation.

THE VERDICT

**Australia wins the demand scenarios, the Middle East wins
the winter:
and TTF is the risk that towers over both.**

Four stress tests separate a near tie. The supply choice is worth a few million; the index exposure is half a billion.

Takeaways

Which hub survives the stress tests



Australia wins most demand scenarios

It serves Korean demand better at current prices: +\$7.3M when Portugal is heavy, +\$5.0M under the summer skew.



The Middle East wins the winter skew

+\$4.7M ahead when Korean contracts fall due in winter: JKM dips in summer while Brent stays stable.



TTF is the risk that towers over both

A one-standard-deviation TTF move swings the book by \$530.4M, five times the Henry Hub range.

Modelled with X-LNG

— Whole-portfolio optimisation for LNG books

1

Your world goes in

Contracts, vessels, charter rates, prices, spot assumptions and constraints, the full book, not a slice.

2

One optimal plan comes out

Feasible, P&L-maximising and constraint-compliant, re-solved for every scenario in minutes.

3

Every number checks out

Each result can be recalculated by hand, transparency your risk committee can audit.

Stress-test the deal before you sign it

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