

X-LNG CASE STUDY · JUL 2025

Building a model of global LNG trade

Turn recorded voyages into regional supply and demand data for testing changes in trade flows.

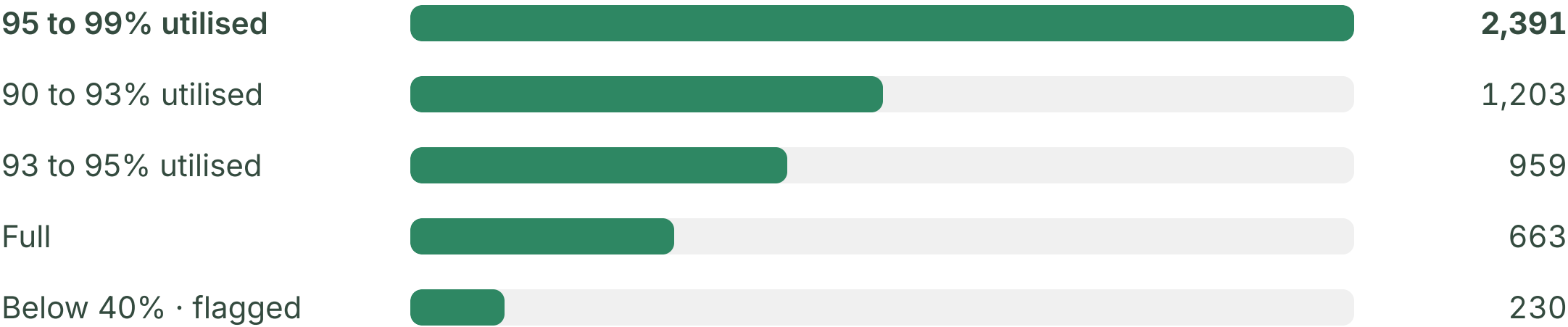


13 regions

HISTORICAL VOYAGE DATA GROUPED FOR
SCENARIO MODELLING

Check cargo size and vessel utilisation first

VOYAGES BY CAPACITY UTILISATION · COUNT



The study excludes cargoes below 30,000 tonnes and flags voyages below 40% vessel utilisation. These filters aim to distinguish commercial deliveries from smaller or repositioning movements.

Turn voyage records into a regional LNG model

2023 historical dataset

VOYAGE RECORDS

Origin / destination

Cargo tonnes

Vessel capacity

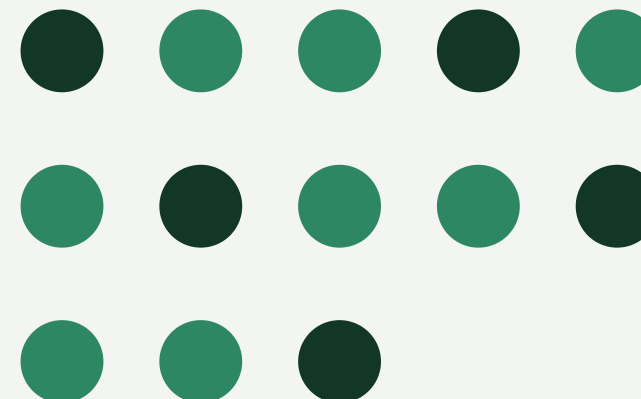
Loading / delivery dates



Convert volumes

Tonnes → MMBtu

3.6M MMBtu reference cargo



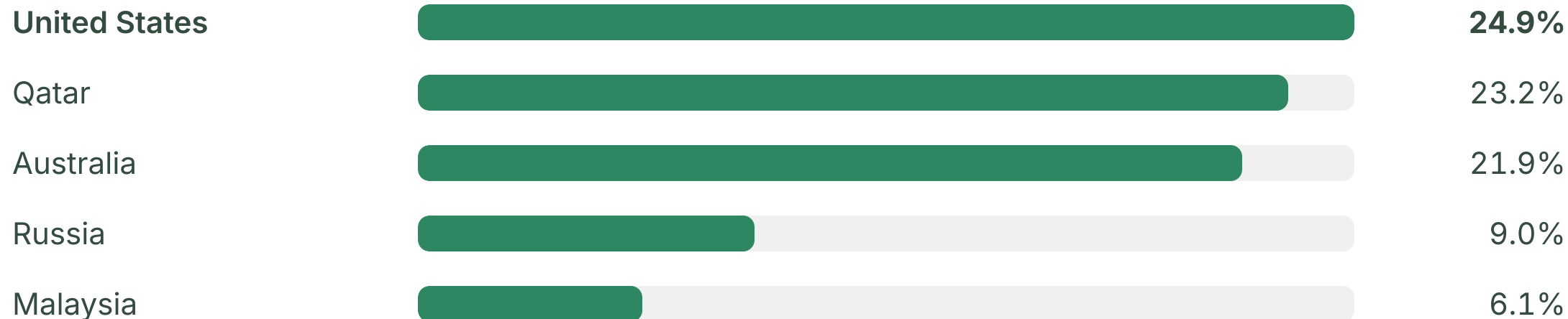
13 trade regions

Apply the same volume conversions and regional definitions to every voyage.

Study filter: cargoes below 30,000 tonnes excluded. Low utilisation is flagged; it does not prove that a voyage was non-commercial.

US, Qatar and Australia lead the export dataset

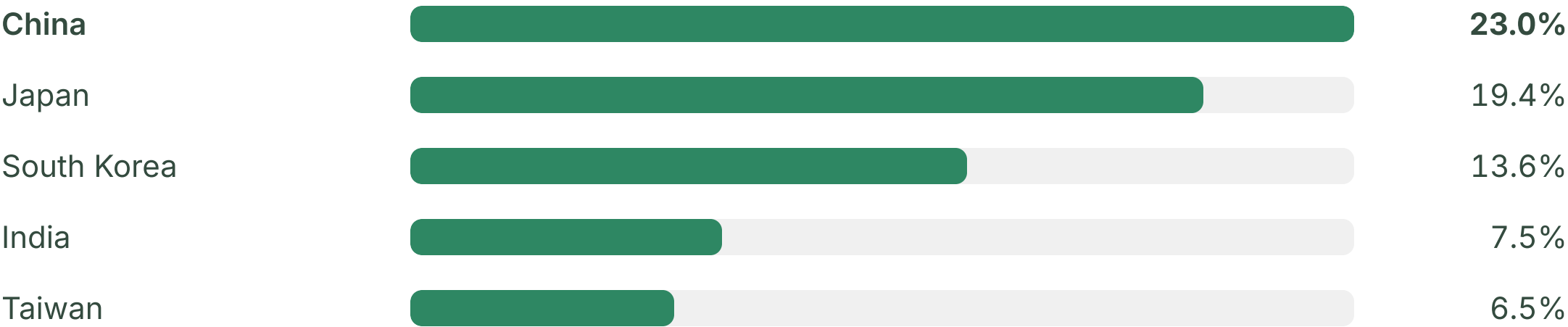
SHARE OF GLOBAL EXPORTS 2023



The displayed export shares are led by the US, Qatar and Australia. These describe the study dataset after filtering, rather than a forecast of future exports.

China, Japan and Korea account for 56% of imports

SHARE OF GLOBAL IMPORTS 2023



The country table reports China at 23.0%, Japan at 19.4% and South Korea at 13.6%. Together, these entries total 56.0% of the displayed country-level imports.

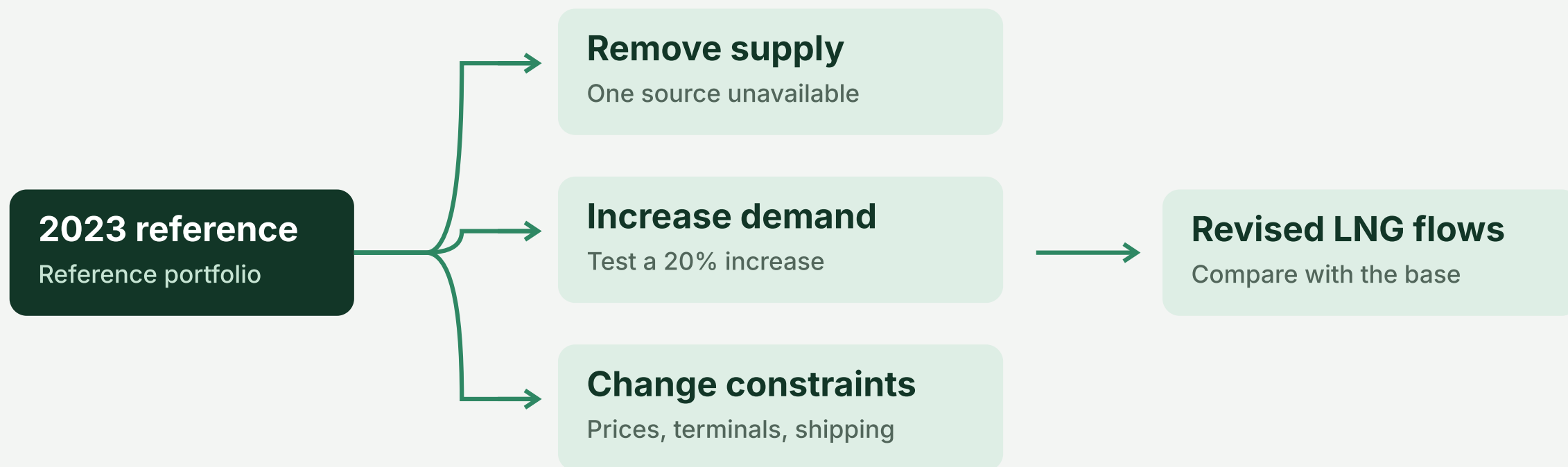
RESULT AND SCOPE

Commercial voyage data grouped into 13 regions.

This is a historical-data modelling study. A filter is an analytical rule, not proof that every excluded voyage was non-commercial.

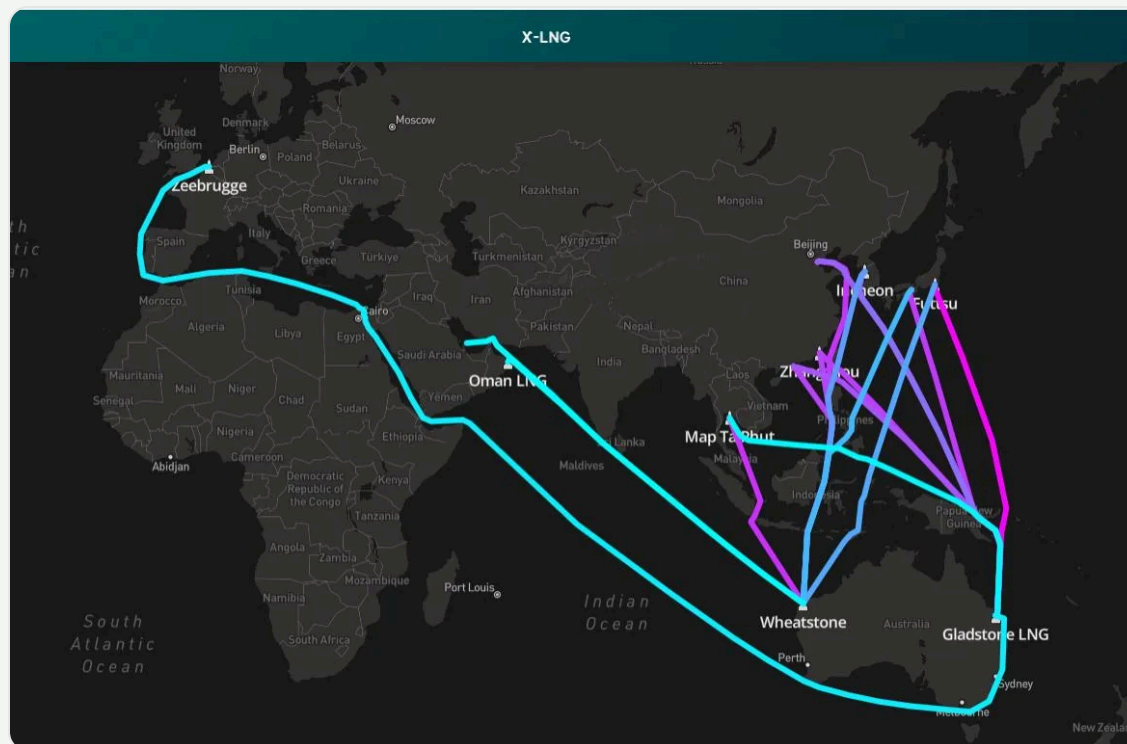
Change supply or demand, then see the new routes

Scenario analysis built from the historical dataset

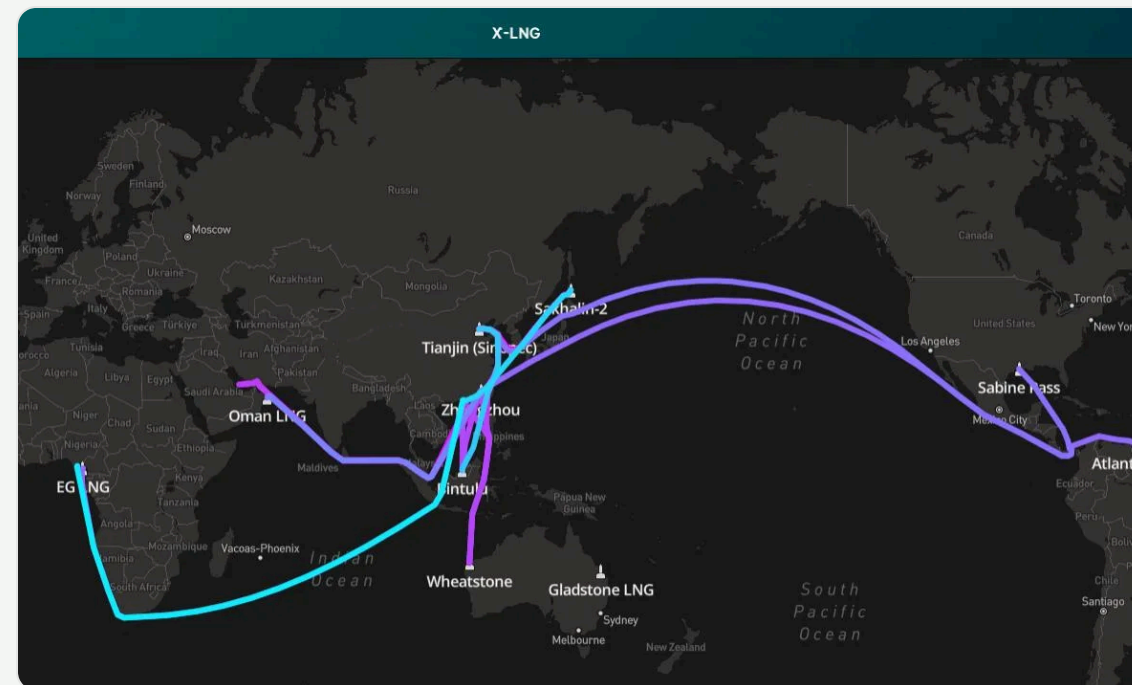


Compare routes, vessel use and terminal flows with the reference model.

From observed voyages to a modelled schedule



AUSTRALIAN SUPPLY UNDER 2023 PRICES



CHINA DEMAND, DIVERSIFIED SUPPLY

These X-LNG screens show the model outputs built from the historical dataset. Observed voyages provide inputs; the optimised flows are calculated outputs.

Model how a supply or demand change affects LNG flows

Calypso Ventures GmbH

www.calypso-commodities.com · ms@calypso-commodities.com

+49 157 769 40574

Bismarckstraße 10-12, 10625 Berlin · HRB 239736 B, Amtsgericht Charlottenburg

Funding acknowledgement

Calypso Ventures GmbH



**Co-funded by
the European Union**

Calypso Ventures GmbH is supported by Investitionsbank Berlin (IBB) through the Pro FIT programme, co-financed by the European Regional Development Fund (ERDF).
