

INTRODUCING LNG BRIDGE

The analytical solution that enables you
to quantify, create & manage LNG
portfolio value



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LNG Bridge has been developed using the extensive commercial LNG experience within our team

It is a versatile & proven solution deployed by a range of leading LNG companies

BRIDGE



The construction & optimisation of LNG portfolios drives value creation. An effective portfolio model is the analytical 'engine room' behind portfolio value creation.

LNG Bridge empowers you with analysis that supports effective decision making and creates a competitive edge.

What is LNG Bridge?

- LNG Bridge is an LNG portfolio analysis model.
- It allows companies to quantify & manage the interdependent value of LNG assets within a portfolio.
- LNG Bridge is underpinned by a sophisticated price simulation & portfolio optimisation engine.
- It uses a 3 step process to optimise & quantify value against simulated market prices (see diagram).

LNG BRIDGE MODEL COMPONENTS

User interface



Model engine



A VERSATILE ANALYTICAL SOLUTION



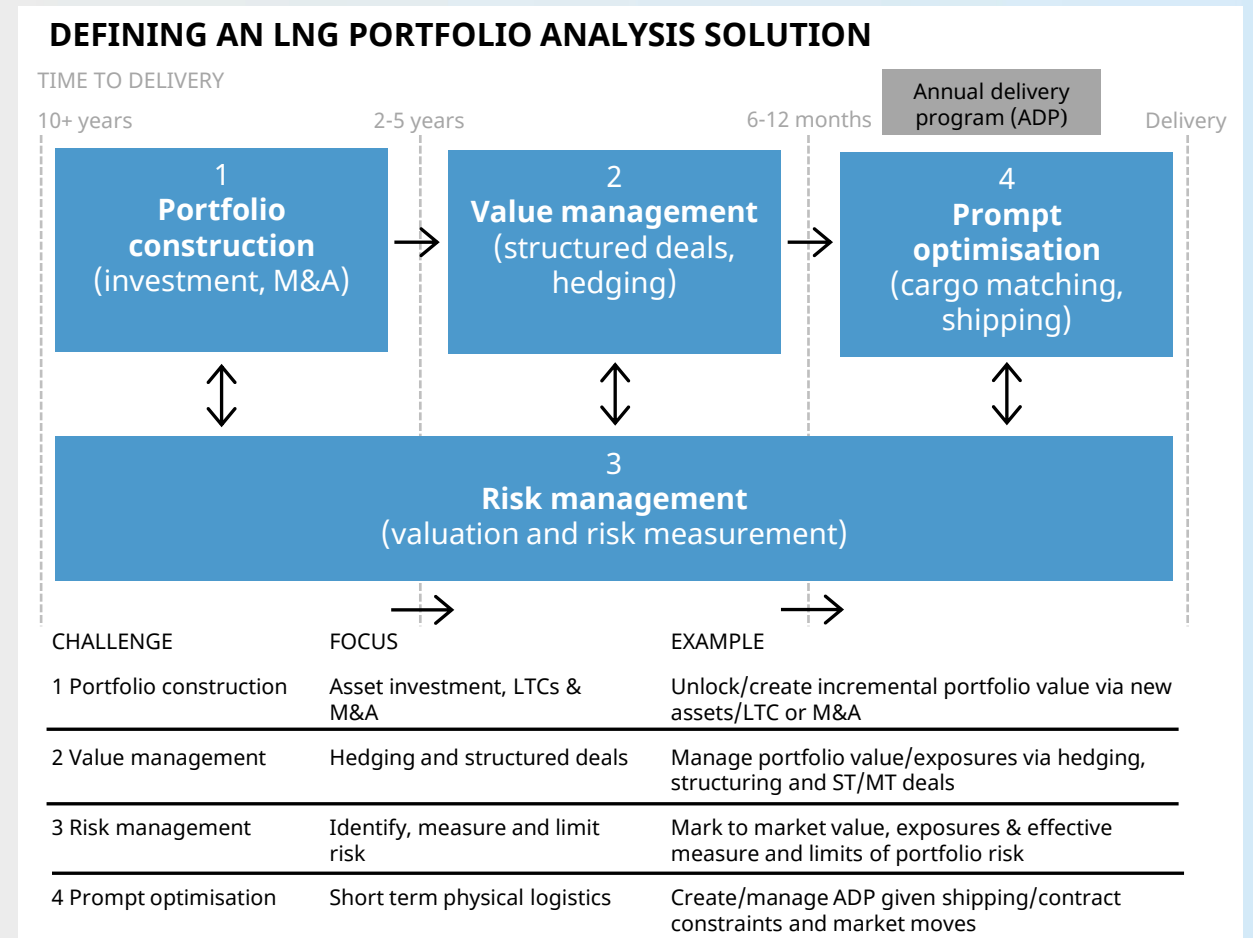
LNG Bridge is an analytical solution that informs decision making on portfolio construction, value management and optimisation. It also supports portfolio risk management.

LNG Bridge supports origination, trading, investment and risk teams to capture & manage LNG portfolio value.

What can I do with LNG Bridge?

LNG Bridge delivers analysis that supports you to:

1. **Value** individual assets and combined portfolios
2. **Originate** and value new deals and structures
3. **Invest** in new assets to enhance portfolio value
4. **Identify** portfolio optimisation opportunities
5. **Manage** portfolio exposures e.g. P&L, hedging and risk



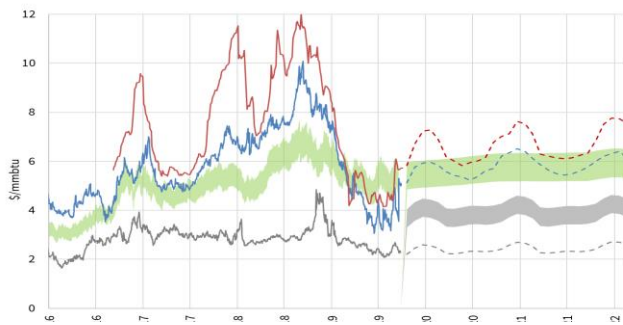
HOW DOES LNG BRIDGE WORK?



- LNG Bridge is built around a sophisticated but transparent Monte-Carlo price simulation engine.
- The model simulates hundreds of individual price paths capturing the unique 'regime' based pricing dynamics in the LNG market.
- For each price simulation, the model steps through a "rolling optimisation" (as prices change) to mimic real world decision making.
- The model then produces value & margin distributions (intrinsic & extrinsic), hedge value, risk metrics and a final cargo schedule.

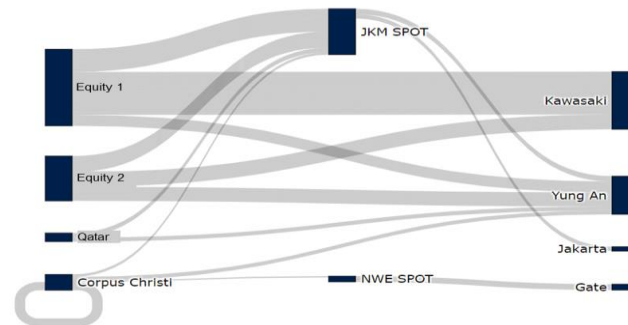
1. Price simulation

- Monte-Carlo simulation engine to model realistic spot & forward prices
- Capture of market regime shifts e.g. well supplied vs tight market dynamics
- Derived price curve logic to capture complex relationships e.g. netback pricing



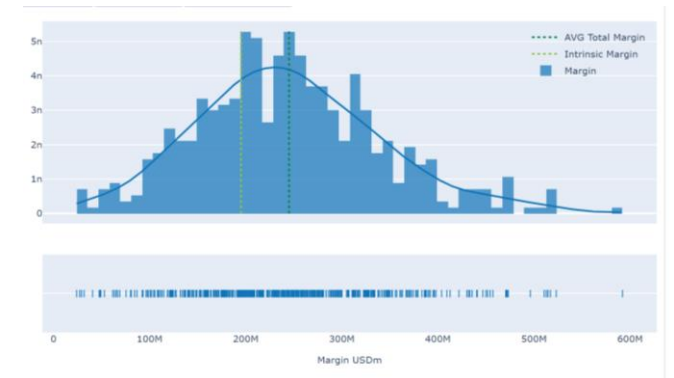
2. Portfolio optimisation

- Core optimisation problem solved as a Mixed Integer Program (sophisticated but common & transparent technique)
- Formulation captures key decision variables & constraints e.g. contract terms, vessel capacity/routing, port/canal constraints, market liquidity



3. Portfolio valuation

- Individual asset & portfolio value distributions, exposures, margins & P&L
- Operational outputs e.g. optimised cargo schedule, capacity utilisation
- Impact of changes e.g. SPA terms, shipping capacity, hedges



LNG Bridge has quickly evolved into an industry leading solution, employed across a broad range of LNG portfolios.

LNG Bridge is developed & supported by extensive LNG commercial experience within our team.

Who uses LNG Bridge?

Our client base is growing rapidly and includes:

- Oil & gas majors
- Large producers
- Utilities
- Commodity traders

Work with clients is underpinned by our first hand commercial expertise of LNG portfolios & markets.

HOW OUR CLIENTS ARE USING LNG BRIDGE

OIL MAJOR

Implementation as global portfolio valuation modelling solution to support value growth.

PORTFOLIO PLAYER

Commercial & risk team implementation to analyse value & risk of existing LNG portfolio & new deals.

PRODUCER

Implementation as global portfolio solution e.g. to analyse spot vs SPA sales strategy & sizing of vessel capacity.

UTILITY

Used to support valuation of large LNG portfolio to support binding bid.

TRADER

Supported valuation for acquisition of portfolio of European regas & SPA contracts.

THE LNG BRIDGE DASHBOARD



LNG Bridge User Interface dashboard view

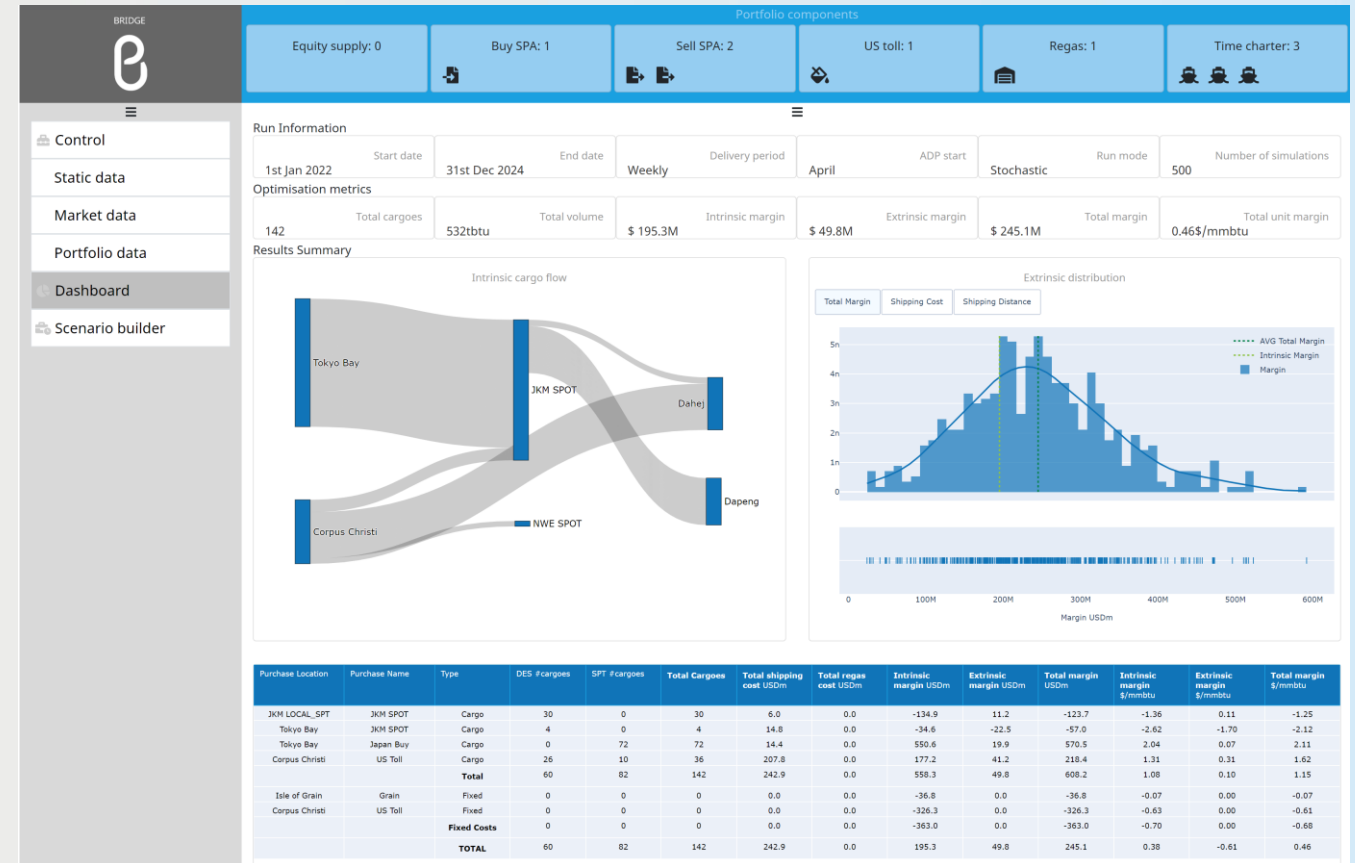
The user-friendly dashboard provides a transparent summary of analysis of portfolio components, optimised flows & margin capture.

What does LNG Bridge deliver?

- Realistic modelling of LNG market prices
- Individual asset & integrated portfolio value
- Optimised cargo flows & vessel utilisation
- Intrinsic & extrinsic valuations of flexibility
- Expected value & risk distributions / metrics

Some examples of analysis

- Value of deal cancellation or diversion rights
- Portfolio impact of an incremental SPA
- Benefits of adding regas to portfolio
- Balancing portfolio oil vs hub index exposures
- Defining shipping capacity requirements



A key benefit of LNG Bridge is its ability to capture a broad range of contract structures, supply chain assets & logistical constraints.

It is also highly configurable, supporting rigorous deconstruction of complex portfolio exposures & flexibility.

What can I capture with LNG Bridge?

- Equity volumes
- Sale & Purchase Agreements
 - Complex price formulas
 - Volume profiles & flexibility (e.g. cancellation & diversion rights)
- US tolling capacity
- Regas & storage capacity
- Own vessels & time charters
- Spot cargo trading & hedging

The screenshot displays the LNG Bridge User Interface. At the top, a blue bar shows 'Portfolio components' with six categories: Equity supply: 0, Buy SPA: 1, Sell SPA: 2, US toll: 1, Regas: 1, and Time charter: 3. Below this is the 'Contract pricing' section for model 'CPR_003', named 'Brent TTF Option'. It includes fields for 'HEADER FIXED CONSTANT' (0) and 'HEADER FIXED CONSTANT CCY' (USD). The 'IS MULT-INDEX?' checkbox is checked. Under 'PRICE OPTIONALITY', 'MIN' is selected. The 'NUMBER OF INDICES' is set to 'TWO'. There are two 'PRICE INDEX' sections, each with 'NUMBER OF COMPONENTS' set to 'ONE'. The first index is 'Brent' with a weighting of 100%, average of 3 months, lag of 0 months, and reset frequency of 1 month. The second index is 'TTF' with a weighting of 100%, average of 1 month, lag of 0 months, and reset frequency of 1 month. Both indices have 'CONVERT TO TRADE CCY' and 'CONVERT TO MMBTU' checked. The 'FIXED CONSTANT' for Brent is 0 and for TTF is 0.01. The 'SLOPE' for Brent is 11% and for TTF is 98.4%. At the bottom, there are 'Add', 'Update', and 'Cancel' buttons. Below the pricing section, a list of components is visible: Equity supply, Sales and purchase agreement, US toll, Regas capacity, Time charter, and Other cashflow.

Technical, implementation & support

- LNG Bridge is an auto-scaling application, with the capacity to run both in physical and virtual environments.
- Timera offers an implementation service that is flexible, efficient & collaborative, customising LNG Bridge to provide you with an effective portfolio analysis solution.
- Our ongoing support service includes model updates and technical support.
- It also covers access to the extensive commercial gas & LNG market expertise within our team.

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Timera clients
include

Specialist energy consultancy

Focus on LNG and European gas & power markets

Extensive industry expertise

Practical knowledge from senior industry roles

Pragmatic commercial focus

Covering investment, value monetisation & market analysis

Strong client base

Leading energy companies (e.g. producers, utilities, traders, funds)

Leading industry blog

20,000+ regular readers, publications, conferences



BRIDGE

