



Course Outline 3 Day Training Course

LNG Markets, Trading and Risk Management

DAY 1

How LNG Trading is changing

- More spot and short term trading
- New exports from Australia and USA
- Changing procurement strategies main buyers
- The Market situation; when will oversupply end?
- New LNG Hubs in Asia
- New price benchmarks in Asian LNG Market
- Growing importance US Henry Hub pricing index
- New LNG financial instruments

Role and exposures different players in the market

- Shorts
 - Japanese, South Korean and Taiwanese power and gas companies
 - Other buying countries
 - Portfolio Players
- Longs
 - Project developers
 - Banks
 - Trading houses
 - Financiers
 - Portfolio players
 - LNG ship owners



Pricing Dynamics

- Market prices reflect change
- Long term view
 - High level trends
- Investment cycles
- Where is the new supply going?
 - Role USA
 - Role Japan, South Korea and Taiwan
 - Over-contracting
 - Asian Growth
 - China and India
- Emerging demand responding to price
 - New importing countries
 - Capacity Constraints
 - FSRU's
- Europe market of last resort
- Support Level in market
- Asian price development
 - US Henry Hub DES Asia

Asia LNG Hubs and Pricing

- Asia's gas pricing transition
- Lessons hub development Europe
- Asian Gas/LNG Trading Hubs
 - Inter-hub competition Hub indexation
 - Singapore
 - Shanghai
 - Tokyo
 - Destination flexibility
 - SLInG Prices
 - Take or pay

LNG Shipping

- Shipping Terms
 - FOB, CIF, DES
- Shipping types and costs
- Cargo routes



DAY 2

LNG contracting structures and pricing mechanisms

- Contract structures
- LNG sales and purchase agreements
- Types of price formation mechanisms
- Regulated vs. Unregulated
- Oil linked vs. Spot
- LNG spot price; Netback pricing concept

Adapting to New LNG Business Models

- Current business models
 - Upstream IOC/NOC
 - Tolling and liquefiers
 - Commodity trading and finance
 - Portfolio Players
 - Large-scale utilities and aggregated buyers
 - Small-scale utilities
- LNG business models face varying opportunities and risks
- New Challenges
 - Continuous diversification LNG market
- Adapting old business models for a new and increasingly complex market
- External factors will continue to drive strategy
 - What are the seven current trends
 - What are the possible future trends
- New technologies enable new markets
- Financing the future

Long term vs. Short term LNG Markets

- What is long term , short term and what is spot
- Potential sources
- Requirements
- Growth drivers
- Current contracting
 - Tenders
 - Bilateral negotiations of Master Sales Agreements (MSAs)



Short-term trading Outlook

- Increase due to oversupply
- Change to market liquidity
- Change to number of players
- Key drivers change
 - Higher efficiency
 - More standardized contracts for gas sales and spot freight
 - Better understanding of operational and performance risks
 - New transparent gas pricing indexes
 - LNG marine fuels price index
 - Bigger role price risk management for buyers
 - Cross commodity spreads
 - No more cost past through to end users

DAY 3

Essentials of LNG Trading

- Players in the trading markets: banks, brokers, traders, end users, producers:
- What is their role? Why do they trade? How do they make money?
- OTC vs. exchange trading
- Spot versus forward trading
- Forward and futures markets and how they function
- Trading physical commodity

Essential Trading Strategies

- Proprietary Trading
- Arbitrage
 - Flexibility in contracts
 - Diversions and reloading
 - Potential players involved in arbitrage deal
 - Playing the spread game
 - LNG Spread Asia vs. Europe
- Hedging
 - Hedging against spot price risk
 - Hedging and liquidity risk
 - Evaluation of trading and hedging strategies



Essentials of LNG derivative instruments

- Forwards
- Futures
- Swaps
- Options

Hedging LNG price exposure

- Oil indexation
 - Brent futures and options
- Henry Hub
 - Henry Hub Natural gas futures and options
- LNG spot indices
 - Swaps, Futures and options

Case Studies: 5 real life LNG hedging scenarios

LNG Risk Management

- Risks in the value chain
- Main Risks
 - Market, Credit and operational risk
- Managing the complexities of LNG

Q & A and Closing Discussion