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COURSE BROCHURE

Energy Markets, Trading and Price Risk Training Course

30 August – 10 September 2027
Singapore

Energy Markets, Trading and Price Risk Training Course

Ref: 703_26319 **Date:** 30 August – 10 September 2027 **Location:** Singapore **Fees:** 12000 GBP

Energy Markets, Trading and Price Risk is a 2-week advanced training course for energy traders, market analysts and commercial managers who take positions across crude, natural gas, electricity and emission allowances, and it ends with a desk-ready price risk mandate. Volatile commodity prices, tighter collateral demands and new electricity market rules now decide the margins of producers, utilities and large consumers. Jupiter Prime Training delivers this course for commercial teams on both sides of the trade.

Why Energy Markets, Trading and Price Risk Matters Now

Three forces reshape trading floors today. Weather-driven renewable output makes intraday power prices swing harder, liquefied natural gas links regional gas hubs into one global price signal, and emission allowance prices now sit inside the generation cost of every thermal plant. Counterparties, lenders and boards watch how a firm measures and limits its exposure. A desk that sizes positions well protects cash flow and credit lines; one that does not can lose a year of margin in a week. The course rests on Value at Risk VaR, the Greeks of option pricing and the International Swaps and Derivatives Association ISDA master agreement structure.

Who Gains Most from Energy Markets, Trading and Price Risk

- Traders responsible for executing physical and paper deals in crude, products, gas or power
- Analysts responsible for fundamental models, spread forecasts and position reporting
- Commercial leads responsible for offtake, tolling and supply contracts with price clauses
- Risk controllers responsible for limits, mark-to-market and exposure reporting
- Origination specialists responsible for structured deals with utilities and industrial buyers

A front office, middle office and origination group from one trading business gains most when they attend together and leave with one shared view of limits and mandates.

Energy Markets, Trading and Price Risk Capabilities

Participants move from reading commodity fundamentals to pricing, hedging and controlling positions across four linked markets.

- Assess supply and demand fundamentals behind crude, gas, power and allowance prices — trading desk outlook
- Calculate spark, dark and crack spreads for generation and refining assets — asset optimisation decisions
- Design hedge strategies with futures, swaps and options — treasury and board risk appetite
- Apply VaR, stress tests and Greeks to a live book — risk committee limit setting
- Weigh electricity market design choices such as nodal pricing and balancing rules — regulatory and commercial strategy
- Specify a price risk mandate with limits, authorities and reporting — senior management approval

Key Energy Markets, Trading and Price Risk Terms

- Spark spread — the margin between the power price and the gas cost of producing that power at a stated heat rate.
- Basis risk — the chance that a hedge and the exposure it covers move differently because of location, quality or timing.
- Contango — a market state in which later delivery months trade above nearer ones, usually reflecting storage and financing costs.
- Value at Risk VaR — an estimate of the largest loss a portfolio should not exceed over a set period at a chosen confidence level.
- Delta — the change in an option's value for a small move in the price of the underlying commodity.
- Locational marginal price — the electricity price at a grid node, combining energy, congestion and loss components.

Energy Markets, Trading and Price Risk Day by Day

Day 1: How Energy Commodity Markets Are Organised

- Exchange and Over-the-Counter Venues — Choosing Where Liquidity Sits
- Physical Versus Financial Settlement — Delivery Obligations and Cash Exposure
- Benchmark Price Assessments — Contract Reference Prices and Disputes
- Market Participants and Their Motives — Reading Order Flow Behaviour
- Trade Lifecycle From Capture to Settlement — Front and Back Office Controls

Day 2: Crude Oil and Refined Products Trading

- Crude Quality Differentials — Pricing Sweet and Sour Grades
- Crack Spread Analysis — Refinery Margin and Run Decisions
- Term Structure, Contango and Backwardation — Storage Play Economics
- Freight and Arbitrage Windows — Cargo Routing Between Regions
- Inventory and Supply Balances — Building a Fundamental Price View

Day 3: Natural Gas and LNG Value Chains

- Gas Hub Pricing and Oil Indexation — Contract Formula Choices
- LNG Cargo Diversion Options — Netback Comparisons Across Destinations
- Storage Valuation Models — Intrinsic and Extrinsic Value Capture
- Pipeline Capacity and Nominations — Transport Cost and Flexibility
- Seasonal Demand and Weather Sensitivity — Winter Supply Positioning

Day 4: Electricity Market Design

- Day-Ahead and Intraday Auctions — Bidding Strategy for Generators
- Nodal and Zonal Pricing Models — Congestion Cost Allocation
- Balancing Mechanisms and Imbalance Charges — Forecast Error Exposure
- Scarcity Pricing and Price Caps — Investment Signals for New Plant
- Power Purchase Agreement Structures — Shape and Volume Risk Transfer

Day 5: Carbon and Environmental Commodity Markets

- Cap-and-Trade Allowance Mechanics — Compliance Buying and Banking
- Carbon Price Pass-Through to Power — Fuel Switching Thresholds
- Clean and Dark Spread Calculation — Thermal Plant Dispatch Economics
- Voluntary Carbon Credit Quality — Integrity Screening for Buyers
- Renewable Energy Certificates — Proving Green Supply Claims

Day 6: Derivatives for Energy Hedging

- Futures and Margining — Cash Calls Under Price Shocks
- Fixed-for-Floating Swaps — Locking Producer and Consumer Margins
- Calls, Puts and Collars — Paying for Downside Protection
- Asian and Spread Options — Matching Averaged Physical Exposure
- Option Greeks Delta, Gamma and Vega — Dynamic Hedge Adjustment

Day 7: Measuring Market Risk

- Mark-to-Market and Valuation Curves — Daily Profit and Loss Integrity
- Historical and Monte Carlo VaR — Choosing a Loss Measure
- Stress Testing and Scenario Shocks — Tail Events Beyond VaR
- Correlation Breakdown Between Commodities — Portfolio Diversification Limits
- Liquidity-Adjusted Exposure — Exit Cost for Large Positions

Day 8: Credit, Contracts and Trading Controls

- ISDA Master Agreement and Credit Support Annex — Netting and Collateral Terms
- Counterparty Credit Exposure — Limits by Rating and Tenor
- Segregation of Duties — Separating Front, Middle and Back Office
- Rogue Trading Red Flags — Detecting Unauthorised Positions
- Market Conduct and Surveillance — Avoiding Manipulation Allegations

Day 9: Portfolio Strategy and Hedge Effectiveness

- Hedge Ratio Optimisation — Balancing Basis and Volume Risk
- Hedge Accounting Effectiveness Tests — Earnings Volatility Treatment
- Asset-Backed Trading — Optimising Generation and Storage Flexibility
- Risk-Adjusted Performance Metrics — Rewarding Desks Fairly
- Risk Appetite Statements — Translating Board Tolerance Into Limits

Day 10: Practising the Desk-Ready Price Risk Mandate

- Fundamental Price View Simulation — Applying Oil, Gas and Power Balances
- Spread Trade Construction — Applying Crack and Spark Spread Methods
- Hedge Book Stress Run — Applying VaR and Scenario Shocks
- Limit Breach Escalation Drill — Applying Controls and Reporting Lines
- Desk-Ready Price Risk Mandate — Final Limits, Authorities and Reporting

Applying Energy Markets, Trading and Price Risk After the Course

- Recalculate the spark or crack spread exposure of one asset and propose a revised hedge ratio to the desk head.
- Run a stress test on the current book using the scenario shocks taught and present the gaps against existing limits.

Energy Markets, Trading and Price Risk Questions FAQ

What is energy markets, trading and price risk and why does it matter now?

It is the discipline of pricing, trading and hedging crude, gas, power and carbon exposure. It matters now because renewable output, global LNG flows and allowance prices make energy prices more volatile, so firms need tighter measurement and control of the positions they hold.

Which roles gain most from energy markets, trading and price risk training?

Traders, analysts, commercial leads, risk controllers and originators gain most. Each handles a different part of the trade lifecycle, and the course gives them one shared language for spreads, derivatives, VaR and limits, which makes desk decisions faster and easier to defend.

How does an energy markets, trading and price risk course differ from an energy strategy course?

It works at desk level rather than boardroom level. A strategy course weighs long-term investment and transition choices, while this course prices individual deals, builds hedges with derivatives and measures daily market risk on a live book of positions.

What do you bring back from energy markets, trading and price risk training?

You bring back a price risk mandate ready for approval. It sets position and loss limits, trading authorities and reporting lines, built on spread calculations, hedge designs and stress results you prepared during the course.

Energy Markets, Trading and Price Risk: The Way Forward

The desk-ready price risk mandate first informs how much exposure the desk may carry into the next delivery season. Traders, risk controllers and the executive committee use it to approve limits and escalate breaches. After its first use, revisit the correlation assumptions between gas, power and carbon, since these shift quickly when market design or weather patterns change.