

Target group

- Back office staff
- IT experts
- Energy risk managers
- Portfolio and risk managers
- Energy traders
- Risk controllers
- Compliance officers
- Internal auditors
- Energy regulators
- Asset developers

Training

This hands-on and very practical 2-day course covers the main themes of Energy Trading & Risk Management. It touches on various risks, though with a focus on market risk. During this course you'll experience the factors which influence the quantification of risk and different ways to calculate exposures. In the course you'll be shown how to control risk and you have to apply derivatives yourself to mitigate risk. Practical exercises provide you with thorough understanding of Forwards, Futures, Swaps and Options. Simulations make this course very much hands-on and show you how to implement asset-backed trading and optimization of assets.

2-DAYS PRACTICAL ENERGY TRADING & HANDS-ON RISK MANAGEMENT

DAY 1

Introduction to risk and risk management

- Return is only half the equation
- The risk management process (Identify, Measure, Control)
- Risk versus reward
- Optimizing portfolios
- The risk management process

Types of risks

- Operational risk
- Geo-political risk
- Regulatory risk
- Market/price risk
- Counterparty/credit risk
- Currency risk
- Liquidity risk
- Legal Risk
- Natural risk, weather risk & transport risk

Market overview

- Market participants (Traders, Hedgers, Speculators)
- Types of products (Gas, Power, Oil and other products)
- Market efficiency in energy markets

Simulation

Speculation – Margining & VaR

Energy trading and trading risk

- Physical trading & associated risk
- Bottlenecks in delivery and capacity (and associated risks)
- Nominations (shippers and program responsible parties)
- Clearing and settlement
- Physical versus financial risk (Location risk, Time risk, Quality risk, Political risk)

Financial trading, derivatives & market impact

- Futures and forward curve risk
- Remote hedges in correlated markets
- Spark, Dark spreads etc. gross processing margin spreads

Exercise

- Spark & Dark Spreads, optimization and associated risks
- Swaps

Exercise

- Gas swap
- Options (conditional products)
 - Risk parameters (Greeks)

DAY 2

Simulation

- Options risk management – Managing Greek variables
- Weather, freight and emission products
 - Trading and hedging strategies
 - Clearing, settlement and margin requirements

More risk issues

- Listed versus bilateral (OTC)
- Portfolio management and balancing regime
- Prop trading, arbitrage and market risk
- Marking-to-Market valuation, allocation, compliance & regulations (IAS39)
- Dynamic hedging or accepting and limiting risk
- Trade management and psychology of trading
- Contract management (EFET, ISDA)
- Order flow and straightthrough-Processing

Case

- Trading screen – Trayport, credit lines, sleeving & masters
- Quantifying (market) risk
- Regulations (top down)
 - Stress testing (CvaR, Event risk, Subjective approaches)
 - Skew, kurtosis and black swans
 - Non-financial risk and incomplete markets
 - Financial Risk & loss
 - (Log)normal distribution and standard deviation
 - Value-at-Risk concept (bottom up) (Variation-co-variation method, Historical method, Monte Carlo method, Why use VaR and why not)

Exercise

Value at Risk calculations in Excel (Variance/Covariance & Monte Carlo)

Risk management and the organization

- Structure of risk management in the organization
- Policies and procedures around market risk, credit risk and operational risk
- Risk management systems