

Masterclass Energy Markets and Derivatives Trading

Introduction

In today's rapidly changing and increasingly challenging world, every organization is facing more complex risks with greater severity. In a recent survey to the global risk management practices commodity price risk is in the top 5 of risks. There is hardly any company that is immune to commodity price risk. The price spike across the commodity complex during 2008 and subsequent collapse late in the year sharpened the focus on all energy exposures and inherent risk implications. Due to the impact of the extreme price movements new players ranging from governments to small companies that previously did not see enough value in hedging became active in the commodity markets as well. Next to the traditional players in the market such as producers, large industrials, traders and investment banks.

A global recovery most likely to start in Asia and will certainly boost demand for commodities. Causing prices to increase fast and probably bring them back to levels last seen in the first half of 2008. What will be the right hedging instruments and strategies for your company to survive these expected price volatilities?

The ability to understand, track and adjust to worldwide trends and know how to manage your commodity risks can mean the difference between success and failure. In this highly interactive and intensive training course Jerry de Leeuw and Kasper Walet will share their commodity markets and derivatives expertise to talk you through all the relevant issues in depth. This will be done with numerous practical examples, case studies and anecdotal evidence.

Learning Objectives

Acquiring insight and knowledge of:

- The working of processes in the energy industry
- The working of local, regional & international energy markets
- Future perspective of energy markets & trading
- Production and consumption
- The working of processes: Upstream, midstream, downstream
- Market participants and their roles
- The working of transport of energy: Shipping, grids & pipelines
- Products traded in the energy markets
- The working and applications of those products
- Pricing, benchmarks and indices
- Risks connected to the energy markets
- Standard deviation & normal distribution
- Skew & kurtosis in distribution of chances
- Correlation
- Usual trading techniques and methods
- Kinds of risk
- Risk parameters
- Hedging
- Products that are suitable for risk management
- The working, pricing and applications of those products
- Optimization of portfolios

Target group

This seminar is particularly suitable for compliant financial and energy community including:

- Decision makers and policy makers of governmental entities
- Energy executives in banking and corporate finance
- Salesmen of financial institutes & energy companies
- Employees of back, mid and front-offices of energy companies, banks and exchanges
- Investment advisors, internal and external accountants, controllers and compliance officers
- Employees of supervisory bodies
- Commodity/energy traders
- Energy equity traders
- Risk managers
- Credit and equity analysts
- Investment managers
- Portfolio managers
- Financial consultants to the energy sectors
- Journalists focused on the energy industry
- Portfolio & asset managers of pension funds and insurance companies

3 Day Program

The Energy MIX

Meeting growing global demand will be one of the biggest challenges facing the energy industry over the coming years, especially if governments continue pressing ahead with carbon emissions reduction targets. Global energy demand is predicted to grow by 44% between 2006 and 2030, according to the US Energy Information Administration (EIA). Because of this, energy is likely to remain a prominent feature of government policy, and this – more than pure economics – will determine the energy mix for the future.

- Oil
 - Crude
 - Refined products
 - Naphtha, gasoline, jet fuel, heating oil and residual fuel oil.
 - Biofuels
- Coal
- Natural Gas
- Nuclear
- Renewables
 - Wind, solar, hydropower, biomass and geothermal sources

Oil

- Supply and Demand fundamentals
- Structuring of contracts
- Fundamental Price drivers
- OTC vs. Exchange trading
- History and future of Trading

Carbon

- Kyoto Protocol and post 2012
- European Emissions Trading Scheme
- Compliance vs. Voluntary Markets
- Flexible Mechanisms
- Trading Platforms
- Role USA

Electricity

- Supply and Demand coming 20 years
- Impact Carbon targets on power prices
- Role renewables
- Role Nuclear

Natural Gas

- Global gas supply/demand dynamic
- Europe, US and Asia

- The main Trading Hubs
- Price Drivers
 - Fundamental supply and demand
 - Competing imports of natural gas
 - Fuel switching.
- Flexibility instruments
 - Storage
 - LNG

Coal

- Supply/demand economics
- Clean Coal Technology
 - Carbon Capture Storage (CCS)
- Role China
- Freight

Trading

- Reasons to trade
 - Hedging, arbitrage, speculation
- Purpose of Hedging
- Volatility reduction
- Trading physical commodity
- Hedging of price and volume
- Short term balancing
- Demand impact on trading
- Selling or Trading
- Management tools for forecasting and portfolios
- Trading problems
- Hedging against the unknown
- Arbitrage - local and international
- Technical analysis

Spread Trading

- Why trade spreads
- Structure of Spreads
- Technical analysis and Spread Trading
 - Market analysis
 - Seasonal, cyclical and historical relationship
- Principles of successful spread trading
- Futures Spreads
 - Locational and Calendar spreads
 - Spark, Dark and Crack Spread
- Option Spreads
 - Bull and Bear Option spreads
 - Straddles and strangles
 - Volatility Spread

Risk Management

- The Main sources of risk
 - Market, credit and Operational
- Main lesson current crisis; an Integrated approach is crucial
- Risk Management Disasters and scandals
 - MG, Barings, Enron Collapse, Amaranth, PVM oil
- Identification and quantification of risks
- Typical trading strategies and their associated risks
- Risk/reward strategies
- Mark-to-Market
- Value-at-Risk
- Correlation and Volatility
 - Implied volatility and smiles

Relation Spot and Forward Markets

- Demand, supply and pricing
- Inventories
- Theory Storage and Futures
- Inventories and Futures Prices
- Convenience Yield
- The Forward Value
 - Backwardation and Contango
 - Forecasts versus forward prices

Derivatives; Forwards, Futures and Swaps

- Forwards, Futures
- Hedging with Forwards and Futures
- Hedging with Swaps
 - Fixed –for floating
 - Floating for Floating Swaps
 - Other types of swaps

Options

- Plain Vanilla Options
- Why and how are options used by hedgers
- Option Pricing Formulas
- European, American and Asian options
- Hedging Options; the greeks
- Integrated physical and risk management contracts
- Swaptions
- Spread Options
- Caps and Floors
- Swing Options

- Virtual Storage
- Real Options
- Cost of hedging with options

Options in structured deals

- Put Call parity and options strategies
- Collars
- 3 way options
- Buy downs and participation
- Flexibility in volume and timing

About the Trainers

Jerry de Leeuw



Jerry de Leeuw is founder and Managing Director of Mercurious (2004). After completing his study in Economics in 1995 he became a MarketMaker on the trading-floor of the European Option Exchange (EOE) in Amsterdam. He was employed by Curvalue on EOE, AEX and Euronext. He established his own MarketMaker company (Summer Traders BV) in 1999, was licensed under the supervisory body AFM, became a Member of Euronext Liffe, and had clearing-contracts with Fortis and Goldman Sachs.

Over the years, Jerry has traded by open out-cry on the floors of various exchanges and has a great deal of experience in screen-based trading. He has traded on EOE, AEX, Euronext, Euronext Liffe, DAX-Xetra, Eurex, NYSE, Nasdaq, NYMEX, CBOT, CBOE, CME, LME, LIFFE, and many more. He has extensive experience in: (convertible) bonds, stock, commodities, options, futures, FX and many other products.

With the Dutch-British energy exchange APX Jerry was responsible for the development of the continental gas markets in Belgium and The Netherlands.

Jerry has taught at the Vrije University in Amsterdam and is project manager for the development of a brand new oil index, unique in its kind. This global price basket (see separate section on this website) and its underlying scientific research paper was first presented the symposium Energy & Value, organized by Multinational Finance Society, in cooperation with Rijks University Groningen and Energy Delta Institute. Today Nyenrode Business University has embraced the project and this means that Jerry is connected to the university in 2008 and 2009.

As a writer, Jerry is columnist for [IEX](#) , [FD](#) (both in Dutch) and [AMEinfo](#) (in English). Next, he is author of the books '*Milkshakes & Butterflies*', '*Hit & Liff*' and '*Energy problems & future perspective*'.

Kasper Walet



Kasper Walet has more than 20 years of experience and extensive knowledge on a theoretical and practical level about all the aspects related to trading, derivatives and risk management in the commodity industry.

Kasper received a Masters degree in Law from the University of Utrecht in 1987. He started his career at the NLKKAS, the Clearing House of the Commodity Futures Exchange in Amsterdam. After working for the NLKKAS for five years, Kasper was appointed as Member of the Management Board of the Agricultural Futures Exchange (ATA) in Amsterdam at the age of 31. While working for the Clearing House and exchange, Kasper became an expert in all the aspects of trading and risk management of commodities.

In 1997 he founded his own specialist-consulting firm that provides strategic advice about (energy) commodity trading and risk management.

Kasper has advised government agencies such as the European Commission, investment banks, major utilities and commodity trading companies and various exchanges in Europe, CEE countries, North America and Asia. Some of the issues he has advised on are the development and implementation of a Risk Management Framework, investment strategies, trading and hedging strategies, initiation of Power Exchanges (APX) and other trading platforms, the set-up of (OTC) Clearing facilities, and feasibility and market studies like for the LNG Market.

Kasper has given numerous seminars, workshops and (in-house) training sessions about both the physical and financial trading of commodity products. The courses have been given to companies all over the world, in countries like Japan, Singapore, Thailand, United Kingdom, Germany, Poland, Slovenia, Czech Republic, Malaysia, China, India, Belgium and the Netherlands.

Kasper has published several articles in specialist magazines such as *Commodities Now* and *Energy Risk* and he is the co-author of a book called *A Guide to Emissions Trading: Risk Management and Business Implications* published by Risk Books in 2004.