Price risk management, hedging, is designed to reduce the price risks associated with trading and introduce an element of certainty to cash flows and profit/loss. This interactive three-day course is designed for delegates with little knowledge of the concept of hedging, allowing them to identify price risk and learn how to manage that risk through different financial instruments.

How does this course benefit you?
In 2014 the price of crude oil was over $100/bl. Less than 18 months later the price had dropped to $30/bl. It then took 2½ years to recover to $70/bl. Today it is trading in a range between $50-60/bl. Few companies’ balance sheets have not been adversely affected by such volatility. Only those companies with a robust and sound price risk management policy will survive and thrive. This three-day course will equip delegates with the knowledge to assess their company’s price risk and ask relevant questions on the design and implementation of a price risk management policy and strategy. Delegates will gain:

- A thorough understanding of the structure of the energy markets
- A comprehensive insight into the issues of price risk management
- A clear and practical understanding of price risk
- Knowledge and understanding of the derivative instruments used in risk management
- The advantages and disadvantages of different strategies

Trainer Profile
David Ford started working in the City of London in 1987 initially for the London Traded Options Market, a division of the London Stock Exchange, before moving to Wise Speke stockbrokers in 1992. After five years broking equity futures and options he moved to the International Petroleum Exchange (IPE) in 1997. At the IPE David was managing director of IPE Training, the training subsidiary of the IPE, establishing it as a worldwide provider of quality energy consulting and related training courses. He has lectured on energy topics throughout Europe, China, Russia, Kazakhstan, Dubai and the US. He played a key role in developing and marketing a number of futures and over-the-counter (OTC) contracts including Brent crude, international coal and EU emissions. Since leaving the IPE he set up Ridgeway Energy Consultancy offering independent energy trading and risk management advice and associated services to the international energy community and has continued to work worldwide. Assignments have included:

- Product development advice and marketing services to an Asian commodity futures exchange, the largest independent European clearing house and a North American energy exchange
- Advising several emerging commodity/energy exchanges and OTC markets
- Designing an OTC clearing service for the coffee, sugar, cocoa and wheat markets
- Designing three futures contracts for the coal markets
- Advising a national oil company on price risk management issues

Course Fees
USD 2,999
Who needs this programme?

The course will benefit delegates who need a thorough grounding in all aspects of price risk management, including general managers and support staff:

- Physical energy traders
- Internal audit
- Legal and compliance personnel
- Hedge funds
- Portfolio managers
- Regulators

Course Agenda

Section 1 – The foundations of price risk management

Trading markets

- Physical
  - Spot
  - Forwards
  - Term
- OTC
  - Swaps
  - Options
- Exchanges
  - Futures
  - Options
- Forward curves

Physical pricing mechanisms – price exposure

- Fixed pricing
- Floating pricing
- Indexation
- Price exposure – profit and loss
- Volatility

Price risk management – Hedging

- Basic principles and objectives
- Identification of risk
  - Credit, operational, basis
  - Risk matrix
- Value at risk
- Hedging volumes
  - Cash flow at risk

Section 2 – Basic hedging instruments

Futures

- Basic concept
  - Definitions and terminology
  - Profit and loss, long and short
  - Exercise and delivery versus cash settlement
- Pricing and forward curves
  - Cost of carry
  - Contango
  - Backwardation
  - Basis

- The clearing house
  - Clearing
  - Central counterparty
  - Margin
  - Exercise and delivery
- Exchange of futures for physical (EFP)
  - Objective of an EFP
  - Increase in open interest
  - Fall in open interest
  - No change in open interest
- Trigger pricing and basis trading – a form of hedging
  - Objectives
  - Trigger pricing process
  - Basis trading
    - Establishing the basis
    - Trading out

Swaps

- Basic structure
  - Plain vanilla
  - Buyer versus seller
  - Fixed for floating
  - Cash flow
- Different types of swaps
  - Differential
  - Participation
  - Extendable
  - Double-up
  - Swaption
  - Pre-paid
  - Margin or crack
- Pricing swaps
  - Forward curve
    - Contango
    - Backwardation
  - Futures
- OTC clearing
  - Dodd Frank
  - EMIR
Section 3 – Advanced hedging instruments

Options

• Basic concept
  o Definition and terminology
  o Exercise and delivery
  o Buyers and sellers, rights and obligations

• Characteristics of options
  o Risk and reward
  o Profit and loss

• Basic trades
  o Long call
  o Short call
  o Long put
  o Short put
  o Gearing

• Principles of pricing
  o Options premium
  o Intrinsic value
  o Time value
  o Volatility

• Option sensitivities – The Greeks
  o Delta
  o Gamma
  o Rho
  o Theta
  o Vega

Section 4 – designing a risk management programme (workshop)

• International accounting standards and hedging
• Policies and procedures
• Control and supervision
• Organisation, roles and responsibilities

All sections contain exercises and workshops