

This 2-day training course is designed to introduce delegates to energy, energy products, energy markets and their developments and constraints. The programme is designed to provide participants an introduction to market fundamentals, such as production and consumption, market participants, energy products, the working of processes, bottlenecks, pricing & trading.

### Learning objectives

The learning objectives of this extensive education programme are to acquire insight and knowledge of, and practical skills regarding:

- Energy products
- Energy markets
- Market participants and their role
- The role of the government
- Management within the energy sector
- The working of processes in the energy sector
- The bottlenecks in the energy sector
  - Availability & technique
  - The environment & sustainability
  - Transport
  - (Geo-)politics
- Integration with the financial markets and the consequences of such

### Target group

This course is specifically suitable for people within utilities, energy companies, supervisory bodies and governmental entities, but also for people within financial institutions, such as capital market exchanges, banks, pension funds and insurance companies, who operate in the field of commodities.

This Mercurious' course is particularly suitable for (new) personnel in the financial and energy markets including:

- New employees of utilities and energy companies, supervisory boards and (energy) exchanges
- Decision makers and policy makers of governmental entities
- Employees of back, mid & front-offices of utilities, energy companies, banks & exchanges
- IT personnel active within the energy sector
- Energy related-personnel in banking and corporate finance
- Risk managers & treasury staff
- Traders & analysts
- Portfolio managers & Investment advisors
- Internal & external accountants
- Controllers & compliance officers
- Legal staff within the energy sector
- Investment & fund managers
- Salesmen & traders of energy companies & financial institutes

# 2-DAYS MASTERING ENERGY, ENERGY MARKETS & ENERGY TRADING

## DAY 1

### Core business of energy companies

- Clients
- Delivery of power and gas
  - Security of supply
  - Liberalization
- Variety of power plants & their working and features
  - Gas-fired
  - Coal-fired
  - Nukes
  - Hydro
  - Wind turbines
  - Solar panels

### Market participants & their role

- Power producers & utilities
- Oil & gas companies
- Large consumers
- Transmission system operators (TSOs)
  - Balancing regimes
    - Nominations
    - Balancing
    - Balancing markets
    - Dispatch
  - Negative prices
- Energy exchanges
- Regulatory bodies
- Governments
- Financials
- The reasons for trading
  - Physical need
  - Hedging
  - Arbitrage
  - Speculation

### Power & gas sector

- Understanding the marketplace
- Market participants
- Shippers
- Programme responsible parties
- Traders, speculators & hedgers

### Products

- Oil + refinery products
  - Brent
  - WTI
- Natural Gas
  - High & Low calorific gas
  - LNG
- Coal
  - API#2
  - API#3
  - API#4
- Power
  - Base
  - Peak
  - Off-peak
- Emissions
  - EUAs
  - CERs
- Transport (Freight & transport capacity)
  - Cross-border routes
  - Capesize routes: C4 & C7
- Weather
  - Weather derivatives

### Case

Contract specifications

### Market fundamentals & pricing

- Demography & economy
- Reserves & availability
- Production & capacity
- Social factors & political policy
- Transport
- Geo-political interests & risks
- Quality
- Exchange rates, inflation & negative correlation
- Seasonality & weather
- Substitution

### Exercise

Pricing

## DAY 2

### Gas specifics

- Gas storage
- Cross border capacity
- LNG
- Storage facilities

### Sustainability

- Energy transition
- Renewables (wind, solar & hydro power)
  - Consequences for pricing
    - Price levels
    - Off peak vs peak
    - Price volatility
- Bio-fuel
  - Food & price problem (food-feed-fuel)
- Nuclear energy
- Feasibility /economical viability

### Trading

- Bilateral (OTC) deals vs. exchange trading
- Brokers and their role

### Exercise

Trayport (Trading screen)

- Gas, power, oil, coal and carbon exchanges
- Spot vs. forward markets
- Clearing & Settlement
  - Collateralization
  - Margining
    - Initial margin
    - Variation margin

- Regulations
- Market coupling

### Exercise

Daily Power auction

### Spreads

- Dark spread
- Spark spread
  - Clean
  - Dirty

### Exercise

Spark and Dark spread