

This course is extremely practical. Participants play trading games and have to solve many exercises & cases. A steep learning curve and an increase of both knowledge and skills will be the result.

### Learning objectives

Acquiring insight and knowledge of:

- Fundamentals of the emissions markets
- Historical, current & future perspective of the emissions markets
- Political developments & Energy investment decisions
- Risks connected to the emissions markets
- Portfolio management & optimization
- The influence of the carbon market fundamentals on emissions trading
- Emissions Trading System (ETS) & Cap & trade mechanism
- The impact of carbon on a companies' asset value & ratings (fuel switching)
- Trading strategies & emissions (trading) strategies
- Generation of project-based credits
- The implementation of derivatives, such as options & swaps

### Target group

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

- Traders (of emissions, power, energy products and/or commodities)
- Risk managers, portfolio managers & investment managers
- Back office staff & IT people in the energy industry
- Energy analysts & Energy executives
- Staff of regulatory bodies
- Financial consultants to the energy sectors
- Journalists focused on the energy industry

### Training

This course is designed to provide participants insight in how the growing international, regional and domestic carbon constraints are generating regulated mandatory and voluntary emissions markets. Emissions trading has a significant impact on the traditional commodity markets, both in the long run, as well as on a short term basis. It has impact on a wide variety of sectors. Energy companies, such as power generators, heavy industry, transportation sector, construction and agriculture will all be influenced. This training provides insight in the different roles that companies can play and what kind of carbon strategies can be applied on the carbon trading market. This stretches from companies with carbon constraints to companies that can generate project-based credits. A new financial market has originated, complete with derivatives, such as futures, swaps and options. It resembles the developments that we experienced in other commodity markets in recent years. Moreover, this growing market is highly mutual depend on energy (and other commodity) markets. And, especially because it is a government-initiated market, it is largely under influence of political developments.

### Content

This course covers two full days. While dealing with each subject, attention is given to the various characteristics, aspects, opportunities and risks attached to that subject. We can tailor the course to match your specific requirements. For example, the course can be split into specific sections or used as a building block for an extended course.

# 2-DAY TRAINING COURSE: CARBON TRADING

## Program

### Fundamentals of emissions market

- The climate issue & climate problems
- Green house effect & Greenhouse gasses
- Kyoto-protocol
- EU Council Directive on Emission Trading

### Implementation

- EU Emission Trading System (EU-ETS)
- Mandatory vs. voluntary markets
- Phases (2005-2007, 2008-2012, post 2012)
- Mechanisms (ETS, CDM, JI)
- Emission rights (EUAs, CERs, ERUs, VERs, COOs, RECs)
- Procedures, requirements, monitoring, verification
- Auctions of emissions rights
- Continuous trading of emissions rights
- National Allocation Plans (NAP)
- Effect on electricity prices (fuel switching)
- Carbon leakage & Registers (ITL, CITL)
- Criminal activities (Theft, Money laundering, VAT carousel)

### Emissions trading

- Organisation & working of the emissions markets
- Carbon as a new uncorrelated asset class
- Spot markets vs. forward trading
- Derivatives (Futures/forwards, Swaps, Options, Clean spark spread & Clean dark spread)
- Auction vs. continuous trading
- Impact on pricing
- Exchange platforms vs. OTC trading (Brokers, Pricing, Liquidity, Transparency, Regulation)
- Risk Management (Legal framework: IETA, EFET & ISDA)

### Trading strategies

- Banking (Lending & Borrowing)
- Fuel switching
  - Carbon intensity
  - Coal plants vs. Gas plants
- Option strategies
  - Cap & Floor
  - Collar
- Swap strategies
  - EUA-CER swap, Fixed-for-floating swap, Fixed leg & Floating leg and Reference price
- Indices (Benchmarks)

### Risk management

- Identification
  - Regulatory risk
  - Counterparty risk
  - Market risk
- Measuring
  - Value at Risk
  - Methodology
  - Stress tests
- Control
  - Derivatives
  - Frameworks

### Exercises

Practical exercises being used in this course help you to understand 'why' and 'how'. This assures that you will improve your skills, besides from the increase of knowledge, by means of facts and theory.

### Exercises used in this course

- Clean Spark & Dark spreads (Fuel switching)
- Auction versus continuous trading
- Price drivers
- Carbon options

### Trading Game

Participants of the course will play trading games. This objective of this is to make attendees familiar with the psychology, pressure and stress of trading (though in a fun way this time). And also to make participants aware of the trading systems traders use, being offered by exchanges, or players in the OTC market. Last but not least by this practical workshop you will be able to implement vocabulary and terminology with respect to trading.