

# Seminar

## Gas & electricity prices: fundamentals, risks & hedging strategies (2 days)

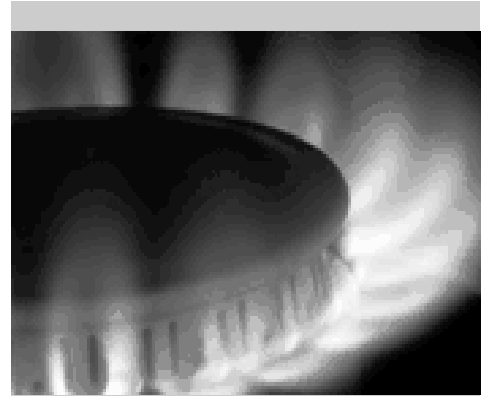
The objective of this seminar is to understand the dynamics of gas and electricity prices, identify the risk factors that impact prices, and outline different hedging strategies.

Upon completion of the seminar, participants will be able to:

- Understand the structure of the European & international gas and electricity markets
- Identify the drivers that impact prices
- Discern the risks and uncertainties in the market
- Understand hedging mechanisms
- Define the steps in a hedging strategy

**Paris, France / 26-27 October 2010 (French)**

Paris, France / 16-17 March 2011 (English)



### Introduction

The rapid emergence in recent years of new rising powerful economies has profoundly impacted energy markets.

Due to this situation, the fluctuation of prices in the oil market is increasingly rapid and pronounced, leading to gas and coal prices volatility with mechanical consequences on electricity markets.

While the long-term price trend undoubtedly foresees higher prices in the future, such instability strongly increases uncertainty in the short and medium term.

Adding further uncertainty to energy markets are new carbon constraints set forth by climate change policies, including the oncoming second phase of the Kyoto Protocol.

Questions concerning the levels of constraint, methods of allocating quotas, mechanisms for flexibility, and carbon prices all combine to add a new dimension to the current energy market.

As Europe continues to liberalise and integrate gas and electricity markets, new opportunities for facing such volatility in prices are emerging.

The seminar organised by Enerdata has 2 objectives:

- to explain the nature and scope of the uncertainty impacting gas and electricity prices
- to identify strategies to hedge against risks stemming from this uncertainty, in a context of the liberalization and integration of European gas and electricity markets.

Bertrand Château, CEO, Enerdata

### About Enerdata

Enerdata is an independant consulting company specialising in the energy sector ([www.enerdata.net](http://www.enerdata.net)).

Enerdata experts and speakers hold advanced degrees in their fields, with more than 30 years of experience in the energy market economics.

They have been leading training sessions for 15 years.

### Other trainings available

- Initiation to energy modelling
- Energy prices on international markets: historical & prospective Analysis
- Energy efficiency evaluation
- Energy accounting
- CDM Projects
- Medpro training

**Duration:** 2 days

### Who will benefit

This seminar is intended for energy sector professionals concerned with electricity and gas supply, particularly: energy economists, european & international analysts, buyers, strategists & planners, finance & accounting managers, and leaders of gas, electricity, and industrial firms. Local authorities and IPPs also stand to benefit.

### Do you know it?

If more than 4 colleagues are interested in the training, save up to 40% on a private session!  
Fill out and fax the formular to the following fax number: +33 (0)1 42 60 22 62

**Organisation** \_\_\_\_\_

**Department** \_\_\_\_\_

**Participants number** \_\_\_\_\_

**Budget** \_\_\_\_\_

### Person to contact

**Name** \_\_\_\_\_

**First name** \_\_\_\_\_

**Position** \_\_\_\_\_

**Phone** \_\_\_\_\_

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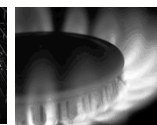
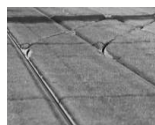
**Email** \_\_\_\_\_

Upon recieving the completed form, we will contact you to determine your training needs.

## Questions? Contact us

By Phone: +33 (0)1 49 26 09 43

By Email: [training@enerdata.net](mailto:training@enerdata.net)



[www.training.enerdata.net](http://www.training.enerdata.net)

## Course Agenda

### Day 1—Gas Prices

#### The purchase price of gas in the international market

##### How does the international gas market work?

- Infrastructure: pipelines and LNG terminals
- Producers, transporters, buyers
- Gas supply in Europe

##### How are gas prices established in international transactions?

- The principal types of gas supply contracts
- Indexing mechanisms and their impact on gas prices

##### Outlook on the evolution of gas prices in the international market

- Outlook on the evolution of oil prices
- Gas-to-gas competition
- Impact of environmental restrictions

#### The European gas market

##### How far have we gone in the liberalisation of the European gas market?

- Market share in principal countries
- Interconnections between countries
- Access to gas distribution networks

##### Gas buying terms for industries

- The principal types of buying contracts
- Spot market
- Futures buying

##### Liberalisation and evolution of prices in the wholesale gas market: historical overview

- United Kingdom, France, Germany

#### Risks and uncertainties in the European gas market

##### What are the major causes of uncertainty?

- Oil market
- Supplier position
- Political climate and energy efficiency policies

##### What are the risks?

- Price risks in indexing markers
- Physical risk in procurement limitations
- Physical risk in demand inflation

##### Risks and price fluctuations in the wholesale gas market: historical overview

- The surge in oil prices 2006-2008
- The crisis in Ukraine
- The impact of ETS

#### Gas risk hedging strategies

##### Long term Contracts

- General conditions
- Indexing mechanisms, price flexibility
- Advantages and disadvantages

##### Short term Contracts

- General conditions
- Indexing mechanisms, price flexibility
- Advantages and disadvantages

##### Spot market purchases, future purchases

- General terms
- Financial hedging mechanisms

## Day 2- Electricity Prices

#### The cost of electricity production

##### Electricity generation costs

- Cost structure per type of plant
- Sensitivity of costs

##### Evolution of generation costs drivers

- Fossil fuel and carbon prices
- Commodities and investment costs
- Renewable intermittency

##### From generation costs to wholesale prices

- Historical overview
- Impacts of policy instruments

#### The European electricity market

##### Where are we in the liberalisation of the European electricity market?

- State of the art in main countries
- Wholesale European markets
- Interconnections between countries

##### Purchasing electricity on the wholesale market

- The spot market
- The forward market

##### Liberalisation and evolution of prices in the wholesale energy market: historical overview

- United Kingdom
- France
- Germany

#### Risks in the European electricity market

##### Price risks for electricity generation inputs

- What risks?
- What impacts on costs?

##### Defaulting risks

- Demand related risks
- Climate change related risks
- Plant construction related risks

##### Risks related to climate change policies and ETS

#### Electricity risk hedging strategies

##### Purchasing electricity: modalities

- Specificities of electricity
- Long term and short term contracts
- Hedging on markets

##### Purchasing electricity: on-line demonstration

##### Risk hedging: **practical exercise**

# ENERDATA SEMINAR—REGISTRATION FORM

## Gas and Electricity prices: fundamentals, risks & hedging strategies

### 1– Select your session

- 26 - 27 October 2010 – Paris, France (French)
- 16 - 17 March 2011 – Paris, France (English)

### 2– Select your tuition fees

- 2 000 €, regular price
- 1 800 €, client/ information service client

We highly recommend you to register two months before the session to ensure a place. Call us ( 0033 (0) 1 49 26 09 43) to check the availability.

### 3 - Tick the following boxes if needed

- I need a registration confirmation to get my visa
- I need a certificate of presence

### Participant details

Name (Ms/Mr) \_\_\_\_\_  
Last Name \_\_\_\_\_  
Company \_\_\_\_\_ VAT n° \_\_\_\_\_  
Function \_\_\_\_\_  
Service \_\_\_\_\_  
Address \_\_\_\_\_  
Zip Code \_\_\_\_\_  
City \_\_\_\_\_ Country \_\_\_\_\_  
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Phone \_\_\_\_\_  
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### Payment options

- I would like to receive a bill with this order number: \_\_\_\_\_
- I am sending a check for \_\_\_\_\_ € made payable to Enerdata
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Bank Name: BNP PARIBAS  
Address: 1 rue Béranger, 38000 GRENOBLE – France  
Account Number: 30004-00617-00010003394-80  
SWIFT Code : BNPAFRPPGRE  
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Expiration Date \_\_\_\_\_ / \_\_\_\_\_ Cryptogram \_\_\_\_\_  
Signature \_\_\_\_\_

### Return your completed registration

By Fax: +33 (0)1 42 60 22 62

By Email: training@enerdata.net

By Mail: 10 rue royale, 75 008 Paris - France

The training cost will be paid by \_\_\_\_\_  
Billing Address if different \_\_\_\_\_  
Address \_\_\_\_\_  
Zip Code \_\_\_\_\_ City \_\_\_\_\_  
Country \_\_\_\_\_

I understand and accept the terms and conditions.

Date: / / 2010

Participant Signature \_\_\_\_\_

Signature and Stamp of Representative \_\_\_\_\_

### Terms and Conditions

The seminar will take place in downtown Rome.

The prices indicated do not include taxes.

The price includes all learning guides and the price of all meals and refreshments. Hotel costs are not included.

#### Billing

A bill will automatically be sent by Enerdata upon receipt of the registration form to the address indicated.

#### Cancellation

Registration is available up to one month before the date of the seminar.

If the participant withdraws from the seminar more than 45 days before the date of the seminar, all payment obligations will be void. 50% of the seminar fee will be paid by the participant in the case of seminar withdrawal less than 45 days before the date of the seminar. If a participant withdraws within 7 days of the seminar date, no payment will be refunded.

Enerdata reserves the right to cancel any training session one month in advance if the number of participants is too low to stage the seminar.

#### Discounts

Enerdata Information service clients (<http://services.enerdata.eu/>) can benefit from a discount.