

# 4th CEVI Energy School October 10-11, 2011 Bilkent Hotel Ankara

# **Objective**

Europe has been engaged in a debate aimed at building an integrated and competitive energy market since the early 1990s. Leaving the previous nationally oriented energy frameworks models aside, the European Union has taken up the responsibility to develop a strategic policy to change current trends. A truly competitive, single European electricity and gas market is expected to be a free market and open to competition of Europe-wide operating companies. Financial markets have responded to these changes by developing new financial products and markets. The market characteristics of physical energy markets that are opening up are fundamentally different from financial markets which are often rather mature. Although physical energy markets and financial energy markets are closely related, they behave differently. The differences in their characteristics and behavior are substantial, and the effects on price formation and exchange processes are complex. Both risk managers and investment managers need to understand what these differences are and how these differences impact both on investment decision-making and effective risk management approaches. As energy supply is still seen as being vital at a country level, the same counts for regulatory body staff.

# Who should attend?

This intensive and interactive training course is designed for practitioners active in energy markets, both the physical market and financial markets. As its primary objective, the course aims to provide a practical understanding of the behavior of energy markets and the risk management implications of physical and financial markets.

The target group of students are employees working in the energy area, such as energy companies, energy markets, regulatory bodies, governments, etc. They will be interested in the finance perspective that CEVI attaches to energy issues .

#### **Date of the Courses**

The courses will take in October 10-11, 2011 in Bilkent Hotel, Ankara

### **Course Program**

Ankara, October 10-11, 2011

# Monday, October 10

9.00- 9.30 hours opening

Prof. Mehmet Baha Karan, Hacettepe University

Prof. André Dorsman, president of CEVI

#### 9.30-12.30 hours Basic introduction to energy economics and Turkey

# **Dr. Wietze Lise** (Freelance, Senior Energy Consultant)

- This course will help professionals in the Turkish power and gas sector to base their decision making on solid principles from energy economics.
- Topics to be covered:
  - o Energy markets and energy prices.
  - o Development and organization of spot and futures markets in energy.
  - o Competition in wholesale energy markets.
  - o Investment incentives and market structure.
  - o Forward contracts, vertical integration and other market power mitigation measures.
- The relationship between energy consumption and GDP in Turkey will be presented and discussed.
- Price formation on the Power Market in a transmission constrained power system and the impact of market power
- Practical and relevant with updates of the latest developments in the Turkish energy market.

Marquette 13, 1081 AD, Amsterdam, The Netherlands

Format will be half instruction and half exercise where the participants can work on finding solutions to their day to day challenges.

#### 12.30-13.30 hours **Lunch**

#### 13.30-16.30 hours Energy and Political Risk

Prof. Dr. John Simpson, Curtin University

- The influences of political risk in oil and gas stock market sectors in the EMU, UK and USA.
- A systemic composite political risk indicator for country oil and gas stock market sectors adjusting for country size and income effects.
- Financing international trade in natural gas using bank financing mechanisms (eg letters of credit) whilst controlling for country and political risk (managing international credit risk in gas exports).
- Managing political and country risk in the export of large natural gas projects and capital
  equipment using government export finance and insurance agencies (bond support, direct
  finance and buyer credit, insurance against buyer insolvency and political risk).

#### Tuesday, October 11

# 9.30-12.30 hours Multi criteria decision analysis in energy

Prof. Dr. Andre Dorsman

- Non-parametric efficiency analysis in energy and environment issues
  - o Data Envelopment Analysis
- MCDA approaches in energy projects evaluation process
  - o Promethee and energy application
  - o Electre and energy application
  - Utadis multiple criteria sorting methodology A multiple criteria energy decision support system

12.30-13.30 hours **Lunch** 

#### 13.30-16.30 hours Short-term electricity demand projections in practice

Dr. Wietze Lise (Freelance, Senior Energy Consultant)

- Practical and applied short-term electricity demand projections are vital for power generators and operators, namely for unit commitment and economic dispatch of generating units.
- This course will help professionals to base their short-term demand projections on sound principles, to safeguard their share in the value of daily power generation of around 50 million US\$ in Turkey.
- A practical and intuitive decomposition of demand into:
  - o hourly variation within the day,
  - o daily variation within the week and
  - o seasonal variation within the year.
- Role of special days, like holidays and bayrams, in reducing the forecasting error will be discussed.
- The advantages and disadvantages of including the link between weather data and hourly demand will be discussed.
- The advantages and disadvantages of univariate methods will be pointed out, which are short term demand projections of using past demand data only.
- Bottom-up approaches using short-term electricity consumption projections on a sectoral basis, will be presented.
- Practical and relevant with updates of the latest developments in the Turkish power market.
- Format will be half instruction and half exercise where the participants can work on finding solutions to their day to day challenges.

16.30-17.30 hours **Panel Discussion** 

Prof. ANDRE Dorsman, Başkan, CEVI

Prof. Dr. John Simpson, Curtin University

Dr. Wietze Lise, Freelance, Senior Energy Consultant

Paul Pottuijt, Gen, Senior Energy Consultant

#### **Biography**

Professor, **Dr John Simpson** is an academic in the School of Economics and Finance at Curtin University, in Western Australia. His PhD in the field of financial economics was obtained from the University of Western Australia (His Bachelor of Economics degree was also obtained from that University and his Master of Commerce degree (by research) was obtained from Curtin University). John is a Fellow of the Finance and Securities Institute of Australasia and a professional member of the Economist's Society of Australia. His academic experience spans 20 years in the areas of teaching and learning and in research and development. A three year secondment as an Associate Professor at the University of Wollongong in Dubai Business School was undertaken from 2003 to 2006. Whilst working in Dubai he also became Vice President of the non-profit making Australian Business in the Gulf Association, the largest Australian business association of its type in the Middle East. John has travelled extensively during his career, including a stint with the United Nations Development Program in Mongolia, in partnership with Curtin University, for academic development of Mongolian University lecturers. He is a board member of the Centre for Energy and Value and the Editor of the Energy and Value Newsletter. He has around 40 articles in internationally refereed journals and around 5 book chapters on research in financial economics. He has presented many research papers at numerous financial economics conferences throughout the world. His areas of research interest broadly relate to international banking, international finance, international business risk and risk management and the financial economics of energy and value, more specifically in the areas of oil and gas pricing, energy market efficiency and the influence of political risk on energy markets.

# Center for Energy and Value Issues



**Dr. Wietze Lise** is a Senior Energy Consultant at the Energy & Environment unit in Ecorys and he also works as a freelance consultant. He has a graduate diploma in mathematical engineering from Twente University, Holland and he holds a PhD in Economics from Delhi School of Economics. His main work experience is in power and gas markets and long term price projections both in Europe and Turkey. However, he also has sound knowledge and experience in energy-economic modelling, economics of climate change, and resource management. During his eighteen years of research and consultancy experience, he worked in Holland at several research and consultancy companies who were leaders in the energy and environment field. In addition to that, he worked together with multidisciplinary teams both in Europe and Turkey, and acquired, produced and managed a myriad of projects. He has more than thirty published and widely cited scientific articles in various international journals. Since 2006, Wietze Lise has focused his research and consultancy work especially on the Turkish energy market and he lives and works in Turkey.