CZ AEE

International Association for Energy Economics

Hosted by: Czech Association for Energy Economics

## NEW CHALLENGES FOR ENERGY DECISION MAKERS

June 4-7, 2003 • Hotel Dorint Don Giovanni Prague, Czech Republic



Extra Conference Extended an Extra Half Day: Over 275 Abstracts Received

## SESSION THEMES AND TOPICS

**Prospects for Global Energy Markets** 

**Energy Market Design: Experiences and Issues** 

Renewable Energy: Enhancing Long Term Security

**Europe and the U.S.: Rethinking Energy Security** 

Efficiency and Regulation of Electric & Gas Distribution Companies

**Sustainable Development in Energy Context** 



**Ethics in Energy Companies Law and Energy Economics** 

Oil & Gas: Frontier Issues

**Solar Energy** 

Business Round Table: New Opportunities in the European Gas Sector

## **CONFERENCE SPONSORS AND PARTNERS** As of 5/22/03)

























Severočeská energetika, a.s.





## **CONFERENCE INFORMATION**

- Program Detail
- Registration Information
- Hotel Information
- Sponsors
- Technical and Social Tours

## WHO SHOULD ATTEND

This conference will attract high profile speakers and delegates from around the world. The opportunities to expand your knowledge within related energy fields and to develop new contacts are vast. Below is a partial listing of who should attend this valuable conference:

- Attorneys & Accountants
- Energy Company Executives & Managers
- Energy Policy Analysts
- Governmental Employees in Energy/Resource Planning
- Academics Specializing in Energy Policy & Analysis
- Electricity Pricing and Market Analysts
- Energy Consultants
- Energy Company Planning Economists
- Energy Risk and Derivatives Specialists
- Energy Forecasting Specialists
- Oil and Natural Gas Executives
- Energy Rate Executives
- Electric and Utility Supervisors
- Energy Environmental Analysts
- Geologists and Engineers
- Environmentalists
- Energy Journalists

In short, anyone with an active interest in the field of energy economics will not want to miss this meeting.

OFFICIAL CARRIER



## **26th Annual IAEE International Conference**

## NEW CHALLENGES FOR ENERGY DECISION MAKERS

Dear Energy Professional,

The time for the 26th Annual IAEE Conference, June 4-7, 2003, is fast approaching. Our Call for Papers was met with an extraordinary response. We have received almost 270 abstracts, which is an all-time high. This reflects not only on the growing worldwide interest in the activities of our organization, but also the importance of the issues that the IAEE is concerned with, especially in today's world. Energy economics issues are becoming key elements in the decision-making processes of world leaders; hence the subject of our conference, "New Challenges for Energy Decision Makers," cannot be more timely.

The number of concurrent sessions had to be expanded to accommodate the large number of papers submitted. At this point, I would like to thank all of those who devoted the time and effort to writing and submitting papers. The Committee reviewing papers appreciated the generally high quality of papers received. Although it was not possible to accommodate all papers into concurrent sessions, the poster sessions will be organized to maximize the number of papers to be presented.

Due to the overwhelming response, we have decided to extend the conference by 1/2 a day on Saturday, June 7. Whoever can survive this ordeal will be rewarded for their endurance and stamina at a "Survivor's Party" at the oldest brewery and pub in Prague with hearty meals, schnapps, and an ocean of the finest beer in the world.

The conference venue, Hotel Dorint Don Giovanni in Prague, is cooperating closely with IAEE Headquarters in making this conference take place in the most pleasant setting possible. For those who wish to stay at this hotel during the conference, the rates are from Euro 151 to 171 per room per night.

The organizing committee, the IAEE Headquarters team, and council members are working hard to make you all happy. Please reward us with your presence at this conference.

If you have any questions or comments, please do not hesitate to contact either the organizing committee or IAEE Headquarters.

Jan Myslivec

Jan Myslivec
General Conference Chair

Ivan Benes Program Chair

low It

#### PROGRAM COMMITTEE

#### GENERAL CONFERENCE CHAIR

Jan Myslivec CityPlan spol.s.r.o.

## PROGRAM CHAIR

Ivan Benes CityPlan spol.s.r.o.

#### **COMMITTEE**

Seyed Alavi

Institute for International Energy Studies,

Lars Bergman

Handelshogskolan i Stockholm

**Fatih Birol** 

International Energy Agency

**Josef Bubenik** Czech Energy Agency

**Leonard Coburn**US Department of Energy

**Jean-Philipp Cueille** Institut Français du Petrole Edgardo Curcio

AIEE
Peter Davies
BP plc

Robert Ebel

CSIS

Georg Erdman
Technical University of Berlin

Marie Fagan

IHRDC

Massimo Filippini

University of Lugano and ETH

Herman Franssen Petroleum Economics Ltd.

Michelle Michot Foss University of Houston

Reinhard Haas Vienna University of Technology

Einar Hone

Norwegian School of Economics and

**Business Administration** 

**Tomas Huner** Severomoravska energetika Peter Kobos

Rensselaer Polytechnic Institute

**Hoesung Lee** 

Council on Energy and Environment, Korea

Michael Lynch

Independent Consultant

I - - I M - - - I

Jacek Marecki Technical University of Gdansk

Monika Mechurova

CZAEE

Arild Nystad
PetroManagement, AS

**Tony Owen** University of New South Wales

Lubos Pavlas Prazska teplarenska

Miroslav Pise

Andre Plourde University of Alberta

Roberto Rios-Herran Legal Advisor

**Virve Rouhiainen** Espoon Sahko Oyj Jiri Schwarz

Liberlani Institut

Johann Sereinig

Verbund

Paul Tempest

BIEE

Frits van Oostvoorn

Energy Research Foundation, Netherlands

ARRANGEMENTS CHAIR

David Williams

IAEE

CONFERENCE MANAGEMENT COMPANY

Administrative Management Services, Inc.

A

## Wednesday, June 4

#### IAEE COUNCIL MEETING

(By Invitation)

8:00 am - 5:00 pm

Donna Anna

## IAEE COUNCIL LUNCH

(By Invitation)

12:00 noon – 1:00 pm Restaurant Teatro

#### REGISTRATION

12:00 noon – 7:00 pm Registration Desk – Don Giovanni Conference Center – 2<sup>nd</sup> Floor

#### **OPENING RECEPTION**

6:00 - 8:00 pm

Klub Lávka

Address: Novotneho lávka 1, Prague 1 Bus Transportation Will Be Provided

#### IAEE COUNCIL DINNER

(By Invitation)

8:00 - 10:00 pm

Parnas Restaurant

## Thursday, June 5

#### REGISTRATION

7:00 am - 7:00 pm Registration Desk - Don Giovanni Conference Center - 2<sup>nd</sup> Floor

## IRAN CONFERENCE PLANNING MEETING

(By Invitation)

7:30 - 8:30 am

Leporello Room

#### IAEE AFFILIATE LEADERS MEETING

(By Invitation)

7:30 - 8:30 am

Donna Anna Room

#### **WELCOME & INTRODUCTION**

8:30 - 8:40 am

Don Giovanni I, II, III

## Michelle Foss

Executive Director, Institute for Energy Law & Enterprise University of Houston IAEE President

## Jan Myslivec

General Manager

CityPlan spol. S r.o.

Prague General Conference Chairman

## KEYNOTE ADDRESS

8:40 - 9:00 am

## Cyril Svoboda

Deputy Prime Minister and Minister of Foreign Affairs

Government of the Czech Republic

## PROSPECTS FOR GLOBAL ENERGY MARKETS

9:00 – 10:30 am Don Giovanni I, II, III

## Herman Franssen, Presiding

Director

Petroleum Economics Ltd.

Panel

## Matthew R. Simmons

President

Simmons & Company International

#### Herman Franssen

Director

Petroleum Economics Ltd.

#### Fatih Birol

Chief Economist – Head, Economic Analysis Division International Energy Agency

#### Fadhil Chalabi

**Executive Director** 

The Centre for Global Energy Studies

#### **COFFEE BREAK**

10:30 - 11:00 am

Foyer 1 & Gallery

## **DUAL PLENARY SESSIONS**

11:00 am - 12:30 pm

## A. EUROPE AND THE U.S.: RETHINK-ING ENERGY SECURITY

## Zerlina, Elvira, Anna Rooms

## Robert Ebel, Presiding

Director, Energy Programs

Center for Strategic & International Studies

#### **Panel**

## Arnold B. Baker

Chief Economist

Sandia National Laboratories

#### **Johannes Maters**

Adviser, Directorate-General for Energy & Transport

European Commission

#### Shirley J. Neff

Senior Advisor

Goldwyn International Strategies

## B. ENERGY MARKET DESIGN: EXPERIENCES AND ISSUES

## Don Ottavio + Masetto Rooms

## Einar Hope, Presiding

Professor of Energy Economics Norwegian School of Economics and Business Administration

## **Panel**

## Lars Bergmann

Professor

Stockholm School of Economics

## **David Newbery**

Director, Department of Applied Economics University of Cambridge

#### **Ben Hobbs**

Professor

The Johns Hopkins University

#### Jiri Schwarz

President

Liberal Institute, Czech Republic

#### LUNCHEON

12:30 – 2:30 pm Don Giovanni I, II, III & Restaurant Teatro

Michelle Foss, Presiding

Executive Director, Institute for Energy Law & Enterprise

University of Houston

Formation of the Eurasian Energy Market and Energy Charter Process

#### Andrei Konoplianik

Deputy Secretary General Energy Charter Secretariat

#### **CONCURRENT SESSIONS - 1 TO 5**

2:30 - 4:00 pm

- I ENERGY PROSPECTS IN THE LONGER TERM
- 2 ELECTRICITY MARKET REFORMS
- 3 ENERGY AND SUSTAINABLE DEVELOPMENT: FROM THEORY TO PRACTICE
- 4 TAXATION ISSUES IN THE ENERGY SECTOR
- 5 BUSINESS ROUND TABLE: NEW OPPORTUNITIES IN THE EUROPEAN GAS SECTOR

#### **COFFEE BREAK**

4:00 - 4:30 pm

Foyer 1 & Gallery

## POSTER SESSION 1

## TECHNOLOGY ISSUES IN ENERGY PRODUCTION AND USE

4:00 - 5:00 pm Board Room 1

## **CONCURRENT SESSIONS – 6 TO 10**

4:30 - 6:00 pm

- WORLD OIL MARKETS: THE BIG PICTURE
- 7 MARKET POWER VERSUS COMPETITION IN LIBERALIZED ENERGY MARKETS
- 8 RENEWABLE ENERGY SOURCES: ISSUES AND PROSPECTS
- 9 ENERGY CONSERVATION AND EFFICIENCY
- 10 ENERGY AND DEMOCRACY

## **RECEPTION**

6:30 - 7:30 pm Don Giovanni Conference Centre **Fover** 

#### **DINNER**

7:30 - 10:30 pm Don Giovanni I, II, III & Restaurant Teatro

Michelle Foss, Presiding

Executive Director, Institute for Energy Law & Enterprise University of Houston

E.ON's Investment Strategy in the Czech Republic

#### Michael Fehn

Chairman

E.ON Czech Holding

## Friday, June 6

#### REGISTRATION

7:00 am - 6:30 pm Registration Desk - Don Giovanni Conference Center – 2<sup>nd</sup> Floor

## TAIWAN CONFERENCE PLANNING **MEETING**

(By Invitation) 7:30 - 9:00 am Leporello Room

## **ENERGY JOURNAL BOARD OF EDITORS MEETING**

(By Invitation) 7:30 - 9:00 am Board Room 9 - 3rd Floor

**DUAL PLENARY SESSIONS** 

9:00 - 10:30 am

A. EFFICIENCY AND REGULATION OF ELECTRICITY AND GAS DISTRIBUTION COMPANIES

Zerlina, Elvira, Anna Rooms

Massimo Filippini, Presiding **Professor of Public Economics** University of Lugano & ETH Zurich

## Panel

Benchmarking and Regulation in the Energy Industries: A General Overview

## Tooraj Jamasb

Department of Applied Economics University of Cambridge

Benchmarking and Regulation: Pitfalls and Issues in Electricity Regulation

## **Einar Hope**

Professor of Energy Economics Norwegian School of Economics & Business Administration

Regulation and Measuring Cost Efficiency with Panel Data Models: Application to Electricity Distribution Utilities

## Mehdi Farsi

Massimo Filippini

Centre for Energy Policy & Economics and University of Lugano

## B. SUSTAINABLE DEVELOPMENT IN **ENERGY CONTEXT**

#### Don Ottavio + Masetto Rooms

Hoesung Lee, Presiding

President

Council on Energy and Environment Korea

#### **Panel**

## Sang-Gon Lee

President

Korea Energy Economics Institute, South Korea

## Ken Koyama

Managing Director Institute of Energy Economics, Japan

#### Mohan Munasinghe

Honorary Chief Energy Advisor, Government of Sri Lanka & Chairman, Munasinghe Institute for Development

#### Michael Grubb

Visiting Professor, ICCET Imperial College, London

## **Jyoti Prasad Painuly**

Senior Energy Planner **RISO** National Laboratory

#### **COFFEE BREAK**

10:30 - 11:00 am Foyer 1 & Gallery

## **POSTER SESSION 2**

## **ENERGY EFFICIENCY AND** SUSTAINABLE DEVELOPMENT

10:30 - 11:30 am **Board Room 1** 

## **CONCURRENT SESSIONS (11 TO 15)** 11:00 AM - 12:30 PM

- 11. CAPACITY ISSUES IN ELECTRICITY AND NATURAL **GAS MARKETS**
- 12. NEW TECHNOLOGIES IN THE TRANSPORTATION SECTOR
- 13. ENERGY AND SUSTAINABLE DEVELOPMENT AROUND THE WORLD
- 14. PRICE FORMATION AND DISCOV-ERY IN ENERGY MARKETS
- 15. LONG-TERM GAS SUPPLY SECURITY FOR AN ENLARGED **EUROPE**

## **LUNCH**

12:30 - 2:30 pm Don Giovanni I, II, III & Restaurant Teatro

Michelle Foss, Presiding

Executive Director, Institute for Energy Law & Enterprise University of Houston

Solar Energy: Value and Cost on a Warming Planet

#### Jeremy Leggett

Chief Executive Solar Century

## **DUAL PLENARY SESSIONS**

2:30 - 4:00 pm

#### A. ETHICS IN ENERGY COMPANIES

#### Zerlina, Elvira, Anna Rooms

Ivan Benes, Presiding

Director, Institute for Economics Transportation & Energy CityPlan Ltd

## Mary-Ellen Boyle

Assistant Professor of Management Clark University

#### Peter A. Davies

VP & Chief Economist BP Plc.

#### John Holding

Manager-Business Planning & Performance **Analysis** 

ChevronTexaco Nigeria Ltd.

## Samuel A. Van Vactor

President

Economic Insight, Inc.

## B. RENEWABLE ENERGY: ENHANC-ING LONG TERM SECURITY

#### Don Ottavio + Masetto Rooms

Tony Owen, Presiding

Professor

The University of New South Wales Nanotechnology for Energy Conversion, Storage and Utilization

## Robert J. Eagan

VP, Energy, Information & Infrastructure Surety

Sandia National Laboratories The Economics of Wind Power

## **Poul Erik Morthorst**

Riso National Laboratory

Growiung Markets for Renewable Energy

## John Mogford

Group VP, Renewables & Alternatives BP plc.

Hedging Our Bets: New Technologies in a World of Uncertainty

## **Rick Sellers**

Head, Renewable Energy Unit International Energy Agency

**COFFEE BREAK** 

4:00 - 4:30 pm Foyer 1 & Gallery

**POSTER SESSION 3** 

## FOCUS ON ISSUES IN OIL AND GAS MARKETS

4:00 - 5:00 pm Board Room 1

## EUROPEAN AFFILIATE LEADERS MEETING

4:30 - 6:00 pm Board Room 9 - 3rd Floor

#### **CONCURRENT SESSIONS - 16 TO 20**

4:30 - 6:00 pm

- 16. PRICE VOLATILITY IN ENERGY MARKETS: STRUCTURE AND CONSEQUENCES
- 17. THE STRUCTURE OF ENERGY (DE)REGULATION
- 18. ELECTRICITY IN THE LONG RUN: ALTERNATIVE GENERATION TECHNOLOGIES
- 19. PRODUCTIVITY ANALYSES OF ENERGY FIRMS
- 20. MARKET-BASED APPROACHES TO ENVIRONMENTAL REGULA-TION IN THE ENERGY SECTOR

#### IAEE GENERAL MEMBERSHIP MEETING

6:00 – 6:30 pm Leporello Room

## OFF-SITE RECEPTION/DINNER

7:00 – 10:00 pm Municipal House Address: Namesti republiky 5, Prague 1 Bus Transportation Will Be Provided

## Saturday, June 7

#### REGISTRATION

7:00 am - 6:00 pm Registration Desk - Don Giovanni Conference Center - 2<sup>nd</sup> Floor

#### **CONCURRENT SESSIONS – 21 TO 25**

9:00 - 10:30 am

- 21. THE SECURITY OF ENERGY SUPPLIES AND INFRASTRUCTURE
- 22. ENERGY POLICY ISSUES
- 23. TECHNOLOGY AND ENERGY EFFICIENCY
- 24. ELECTRICITY MARKET LIBERALIZATION: THE EUROPEAN EXPERIENCE
- 25. SUPPLY-SIDE ISSUES IN CRUDE OIL AND NATURAL GAS MARKETS

#### **COFFEE BREAK**

10:30 - 11:00 am Foyer 1 & Gallery

## **POSTER SESSION 4**

## DEVELOPMENTS IN ELECTRICITY MARKETS

10:30 - 11:30 am Board Room 1

## **DUAL PLENARY SESSIONS**

 $11:00 \ am - 12:30 \ pm$ 

A. LAW AND ENERGY ECONOMICS

Don Giovanni I, II, III

Roberto Rios-Herran, Presiding Legal Advisor

**Panel** 

Nils von Hinten-Reed

Director

CapAnalysis (Europe)

Roberto Rios-Herran

Legal Advisor

**Charles McPherson** 

Senior Adviser, Oil, Gas & Chemicals World Bank Group

Alfred John Boulos

International Advisor & Counsel Boulos International

B. OIL & GAS: FRONTIER ISSUES

Don Ottavio + Masetto Rooms

Jean-Philippe Cueille, Presiding

Professor IFP

and

Vratislav Ludvik, Presiding

Principal ONYX

**Panel** 

Jean-Pierre Favennec

Directeur, Centre Econ. & Gestion IFP-ENSPM

John R. Brodman

Deputy Assistant Secretary for International Energy Policy

US. Department of Energy

**Ray Leonard** 

Vice President, Exploration YUKUS Oil Corporation

Adam Sieminski

Director & Global Energy Strategist Deutsche Bank AG

## **LUNCH**

12:30 – 1:30 pm Restaurant Teatro Network With Your IAEE Colleagues

## **CONCURRENT SESSIONS – 26 TO 30**

1:30 - 3:00 pm

- 26. APPROACHES TO ELECTRICITY AND NATURAL GAS REGULATION
- 27. EUROPE LOOKS EAST: THE EU AND ENERGY IN EASTERN EUROPE AND CENTRAL ASIA
- 28. SOME CONSEQUENCES OF LIVING IN A CARBON CONSTRAINED WORLD
- 29. THE PROFITABILITY OF ENERGY FIRMS: THEORY AND MEASUREMENT
- 30. PRICING ISSUES IN ENERGY MARKETS

#### **COFFEE BREAK**

3:00 - 3:30 pm Foyer 1 & Gallery

## **CONCURRENT SESSIONS – 31 TO 35**

3:30 - 5:00 pm

- 31. INVESTMENT IN ELECTRICITY MARKETS
- 32. ENERGY DEMAND ANALYSIS
- 33. MORE CONSEQUENCES OF LIVING IN A CARBON CONSTRAINED WORLD
- 34. ISSUES AFFECTING MARKETS FOR CRUDE OIL AND REFINED PRODUCTS
- 35. BACK TO THE FUTURE?: THE SECURITY OF ENERGY SUPPLY

#### **CLOSING REMARKS**

5:00 – 5:20 pm Don Giovanni I, II, III

#### Michelle Foss

Executive Director, Institute for Energy Law & Enterprise
University of Houston

## Jan Myslivec

General Manager CityPlan spol. S r.o.

## FAREWELL / SURVIVAL PARTY

8:00 pm - 12:00 midnight U Fleku Kremencova 11, Prague 1

#### **CONCURRENT SESSIONS - 1 TO 5**

Thursday, June 5 2:30 - 4:00 pm

#### ENERGY PROSPECTS IN THE LONGER **TERM**

Zerlina Room

Edgardo Curcio, Presiding

President AIEE

U.S. National Energy Policy: Is the Gulf Widening?

Daniel McGroarty

White House Writers Group

Marvin J. Horowitz

Demand Research

Long Term Scenarios for Energy Markets

A.J.G. Manders

M. Mulder

CPB, Netherlands Bureau for Economic Policy Analysis Iraq: The Last Great Oil Prize: An Oil Industry Perspective

Mamdouh G. Salameh

Oil Market Consultancy Service

Development of World Energy Prices Model, WEPM

Yuko Hoshino

Yutaka Nagata

Norihisa Sakurai

Socio-Economic Research Center

Central Research Institute of Electric Power Industry (CRIEPI)

ELECTRICITY MARKET REFORMS

Donna Elvira Room

Jose Gonzalez Santalo, Presiding

Director de Sistemas Mecanicos

Institute de Investigaciones Elect.

Development of a Competitive Electricity Market in Indonesia

Andreas Korn

**Peter Pintz** 

Fichtner GmbH & Co.

Past, Present and Future of the Latin-American Electricity Markets

Isaac Dyner R.

Universidad Nacional de Colombia

Santiago Arango Bergen University

Erik Larsen

Case Business School

Future of the Lithuanian District Heating Sector: Number of CHP's or Decentralisation?

**Ramunas Gatautis** 

Lithuanian Energy Institute

The Feasibility of European Electric Reforms, A New-Institutional Economics Evaluation

**Yannick Perez** 

Université Paris I Panthéon-Sorbonne

ENERGY AND SUSTAINABLE DEVELOPMENT: FROM THEORY TO PRACTICE

Donna Anna Room

Reinhard Haas, Presiding

**Energy Economics Group** 

Vienna University of Technology

The Energy Economic Benefit of Integrated Development Planning Policies

Elizabeth Marshall

Area Development Manager

Highland Council, Scotland

The Energy Sector in the Context of Sustainable Development - A Review of Concepts

Regina Eich

Jurgen-Friedrich Hake

Research Centre Juelich, Germany

The Role of Regions in the Framework of Sustainable Energy Policies and Programs

Marcello Antinucci

Paola Perini

ECUBA srl, Bologna, Italy

Valentinas Klevas

Lithuanian Energy Institute

Brazilian Energy Prospects Seeking the Sustainable Development

Ildo Luis Sauer

Luiz Claudio Ribeiro Galvão

Miguel Edgar Morales Udaeta

André Luiz Veiga Gimenes Cláudio Elias Carvalho

**GEPEA** 

Universidade de São Paulo, Brazil

## TAXATION ISSUES IN THE ENERGY SECTOR

Leporello Room

Peter A. Davies, Presiding

VP & Chief Economist

BP plc.

Taxation of Oil Companies Having Outside Options

Trond Olsen

Norwegian School of Economics & Bus. Admin.

Petter Osmundsen

Stavanger University College

A Conflict of Interests in Electricity Taxation?

Bente Halvorsen

Runa Nesbakken

Statistics Norway

The Impact of Oil Taxation on Fields' Profitability in the UK North Sea – A Comparison with Five International Representative Regimes

Carole Nakhle David Hawdon

University of Surrey

Downstream Energy Taxation: Where Does Oil Stand?

Nadir Guerer

Assistant to the Director of Research Division OPEC

BUSINESS ROUND TABLE: NEW OPPORTU-NITIES IN THE EUROPEAN GAS SECTOR Don Ottavio + Masetto Rooms

Tor Vesterhus, Presiding

CEO

GasOracle AS

Conference delegates are invited to join an open round table discussion on new business opportunities within the European gas sector in light of both the liberalization process and the European enlargement towards the east.

#### **CONCURRENT SESSIONS - 6 TO 10**

Thursday, June 5 4:30 - 6:00 pm

## WORLD OIL MARKETS: THE BIG PICTURE

Zerlina Room

John Holding, Presiding

Manager-Business Planning & Performance Analysis ChevronTexaco Nigeria Ltd.

The World Oil Economy 30 Years After the First Oil Price Shock

Ferdinand E. Banks

Professor

Uppsala University

Geopolitics and the Oil Market: Post Cold War Era

Mohammad Sadegh Memarian

National Iranian Oil Company

Regionalization of the Global Oil and the Nation State

Alexandre Babak Hedjazi

Regional & International Development

**UCLA** 

Oil Companies and Energy Security in China

**Adam Louis Shrier** 

Strategic Advisor

Global Development Opportunities, LLC

#### MARKET POWER VERSUS COMPETITION IN LIBERALIZED ENERGY MARKETS

Donna Elvira Room

Bo Andersson, Presiding

Head of Analysis

Graninge Electricity Trading

Liberalisation of Integrated Energy Markets and Market Power Issues

Henrik Klinge Jacobsen

Peter Fristrup

Risø National Laboratory

Jesper Munksgaard

Anders Larsen

AKF, Danish Institute of Local Government Studies

The More Co-operation, The More Competition?

Fieke Riikers

Adrian Wals

Energy Research Centre of the Netherlands **Benjamin F. Hobbs** 

The Johns Hopkins University

The Ouestion of Market Power In Restructured Electricity Markets

**Sophie Meritet** 

C.G.E.M.P.

Université Paris IX – Dauphine

Competition and Prices on a Multinational Market for Electricity: The Case of the Nordic Countries

Eirik S. Amundsen

University of Bergen Lars Bergman

Stockholm School of Economics

Combining Transmission and Energy Markets Mitigates Market Power

Karsten Neuhoff

Faculty of Economics and Politics

University of Cambridge

#### RENEWABLE ENERGY SOURCES: ISSUES AND PROSPECTS

Donna Anna Room

Morgan Bazilian, *Presiding*Department Head - Sustainable Energy Services

Sustainable Energy Ireland

Wind Energy - Present Status - Outlook - Energy System Analysis

H.-J. Wagner

D. Guerzenich

R. Tryfonidou

Energy Systems and Economics

University of Bochum, Germany Rent of Hydropower Generation in Switzerland

Silvia Banfi

Adrian Müller

Federal Institute of Technology, WEC

Massimo Filippini

University of Lugano

Prospects and Potential for Cost Reductions in PV Systems

Daniele Poponi

Department of Economics

University of Bari, Italy

Electric Power Leveler by Polymer Electrolyte Fuel Cell Co-generation System and its Economic Implication

Yutaka Yoneda

Shigeru Yasukawa

Electrical Engineering & Electronics

Kanazawa Institute of Technology ENERGY CONSERVATION AND EFFICIENCY

Leporello Room Fridtjof Unander, Presiding

Senior Analyst

International Energy Agency

A Consistent Approach to the Computation of an Enduse Energy Efficiency Indicator: A Demonstration of Industrial Sector Time-series Data in Taiwan

Yunchang Jeffery Bor

Cheng-Shu Lin

Chung-Hua Institution for Economic Research

Demand Curves for Electricity Efficiency in OECD Countries

Aviel Verbruggen

Professor

University of Antwerp

Consequences of the U.S. Commercial Sector Energy Efficiency Regime

Marvin J. Horowitz

President

Demand Research

Cost-Benefit Analysis on Energy Conservation Measures in Energy-Intensive Industries of Taiwan

**Chi-Yuan Liang** 

Research Fellow, The Institute of Economics

Academia Sinica

#### 10 ENERGY AND DEMOCRACY

Don Ottavio + Masetto Rooms

**Participants** 

**Michelle Foss** 

University of Houston

Kevin Warr

U.S. Agency for International Development

James B. Sullivan

U.S. Agency for International Development

This session will be facilitated discussion on issues associated with international technical and development assistance using country case studies. IAEE delegates with research and experience in this arena are invited to par-

## **CONCURRENT SESSIONS - 11 TO 15**

Friday, June 6 11:00 am - 12:30 pm

#### 11 CAPACITY ISSUES IN ELECTRICITY AND NATURAL GAS MARKETS

Zerlina Room

Kjell Sunnivag, Presiding

Research Coordinator

Optimisation Model for Rationing Efficient Allocation of Capacity in a Natural Gas Transportation Network

Hans Jorgen Dahl

Gassco AS

**Asgeir Tomasgard** 

Norwegian University of Science & Technology

Frode Rømo

SINTEF Industrial Management

Electric Transmission and Rents in Europe

**Anthony Baeza** 

**Economics Department** 

Université Paris IX – Dauphine

Transmission Congestion Risks

Tarjei Kristiansen

Department of Electrical Power Engineering

Norwegian University of Science and Technology

Mandatory Capacity Margins - Good Idea or Not?

Robert L. Borlick

Senior Advisor

Henwood Energy Services

The Role of Excess Capacities for Effective Competition in Electricity Markets

Reinhard Haas

**Energy Economics Group** 

Vienna University of Technology

12 NEW TECHNOLOGIES IN THE TRANSPOR-TATION SECTOR

Donna Elvira Room

Rick Sellers, Presiding

Head, Renewable Energy Unit

International Energy Agency

Analysis of the Impact of Technological Innovation to Reduce CO, Emission for Global Environment

Toshihiko Nakata

Tetsuva Togasaki Shuichi Ashina

Tohoku University

Gas-to-Liquid Technologies: Recent Advances, Economics, Prospects

Isaac Rahmim

Energy Consulting Practice

E-MetaVenture, Inc.

Conventional Versus Innovative Technologies in the Transportation Sector: External Costs and Benefits

Amy Myers Jaffe

Kenneth B. Medlock III

Ronald Soligo

Rice University

An Optimum Fuel Consumption Model for the Transport of Cargos by Road Vehicles

Mahmoud Saffarzadeh

Tarbiat Modares University

Abdlreza Rezaee-Arjroody

Road & Transportation Research & Training Center

13 ENERGY AND SUSTAINABLE DEVELOP-MENT AROUND THE WORLD

Leporello Room

Franz Meister, Presiding

Staff Member

Umweltbundesamt/Federal Environment Agency

California's Renewables Portfolio Standard: Can It Recharge a Failed Effort?

Asbjorn Moseidjord

ChevronTexaco Professor of Energy & Resources

Saint Mary's College of California

Renewable Energy in Iran: Challenges and Opportunities for Sustainable Development

Madjid Abbaspour

Sharif University of Technology

Head of Iranian Association for Energy Economics

Farideh Atabi

Islamic Azad University

Iranian Association for Energy Economics

Sustainable Local Economy in Communities in Michoacan

Juan Jose Jardón Urrieta

Professor of Finance

Universidad Michoacana de San Nicolás de Hidalgo

Sustainable Development Problems of Latvian Energy

K. Mikelsons

Latvian Power Company "Latvenergo"

V. Zebergs

N. Zeltins

Latvian Academy of Science

#### 14 PRICE FORMATION AND DISCOVERY IN ENERGY MARKETS

Donna Anna Room

Paul Horsnell, Presiding

Head of Energy Research

JP Morgan plc

Regulation, Competition and Price Formation in the UK Gas Industry

Philip Wright

Ian Rutledge

School of Management

University of Sheffield

Investment Costs and Equilibrium Energy Prices in Europe

**Geoff Frewer** 

Economist

European Investment Bank

El-Gas Deregulation – Price Convergence?

Frank Asche

Petter Osmundsen

Ragnar Tveteras

Stavanger University College Atle Guttormsen

Agricultural University of Norway

A VAR Analysis of the Energy Prices in a Liberalised Market

Paula Ferreira

Madalena Araújo

University of Minho, Portugal

Isabel Soares

University of Porto, Portugal

Price Discovery in Gas Market, A Case of UK

Sharon Lin

Michael Tamvakis

CASS Business School, London

LONG-TERM GAS SUPPLY SECURITY FOR AN ENLARGED EUROPE

Don Ottavio + Masetto Rooms

Frits van Oostvoorn, Presiding

Manager, European Studies

Energy Research Centre of the Netherlands

Future Supply in a Liberalized European Gas Market -The Emergence of New Suppliers

Eirik Lund Sagen

Senior Executive Officer

Statistics Norway Research Department

Long Term Gas Supply for Filling the "Supply Gap" in Europe Against Affordable Prices

Frits van Oostvoorn

Maroeska Boots

Energy Research Centre of the Netherlands

The Effect of Liberalisation of Gas Markets on Trade, Contracting and Supply Sector

Sandro Furlan

Coordinator, Energy & Environment Department Eni Corporate University

The Supply of Natural Gas From Russia: An Intertemporal Market Analysis

Jeroen de Joode

CPB, Netherlands Bureau for Economic Policy Analysis

## **CONCURRENT SESSIONS - 16 TO 20**

Friday, June 6 4:30 - 6:00 pm

PRICE VOLATILLITY IN ENERGY MAR-KETS: STRUCTURE AND CONSEQUENCES

Don Ottavio + Masetto Rooms

Virve Rouhiainen, Presiding Risk Manager

Expoon Sahko Oyi

Exploring the Impact of Price Volatility on Energy Markets

Mark Finley

Senior Economist

BP America Inc

Does the Black-Scholes Formula Work for Electricity Markets? A Nonparametric Approach

Erik Hjalmarsson

Department of Economics

Yale University

Coping with Oil Price Volatility Michael C. Lynch

**Energy Consultant** 

MIT Oil Price Volatility and OPEC Compliance: A Challenge

for OPEC Policy Makers

Mohammad Mazraati Institute for International Energy Studies, Iran

Shayegan Energy and Economy Consultants 17 THE STRUCTURE OF ENERGY

> (DE)REGULATION Donna Elvira Room

Shirley J. Neff, Presiding

Senior Advisor

K. Abbasi

Goldwyn International Strategies

Restructuring the Regulatory Framework in Developing Countries

Garry E. Vollans

Senior Consultant

FMP Flaman Management Partners Ltd.

Optimal Power Reform Design: Experience from Liberalization

Luciano Losekann Universidade Federal do Rio de Janeiro

Joanne Evans

University of Hull

Weighing Ways of Keeping the Energy Balance

**Hamilcar Knops** 

International Institute of Energy Law

Leiden University

Efficiency and Equity in a Deregulated Electricity

Youngho Chang

Assistant Professor, Dept. of Economics

National University of Singapore

Regulatory Exigencies of Electricity Reform in Australia

Deepak Sharma

Associate Professor

University of Technology, Sydney

ELECTRICITY IN THE LONG RUN: ALTERNATIVE GENERATON TECHNOLO-**GIES** 

Donna Anna Room

John W. Jimison, Presiding

**Executive Director** 

U.S. Combined Heat & Power Association

Study on the Economic Aspects and Policy Options of Clean Coal Technologies

Toshihiko Nakata

Ryo Kinugasa

Management of Science and Technology

Tohoku University

CO, Emission Impacts of Large Penetration of Distributed Generation Systems in Japan

Hiroshi Asano

Masahito Takahashi

Ei-ichi Imamura Senior Research Scientist

Central Research Institute of Electric Power Industry (CRIEPI)

Socio-Economic Evaluation of Long Term Energy Options: The Case of Fusion

GianCarlo Tosato

Socio-Economic Studies

European Fusion Development Agreement

Gas Fired Power Plant Investments with CO, Capture

Stein-Erik Fleten

**Thomas Dobbe** Siur Sigmo

Norwegian University of Science & Technology

Technology Adoption and Sustainable Development in Liberalised Electricity Markets: A Panel Data Study for Six OECD Countries

Reinhard Madlener

CEPE, ETH-Zentrum WEC C

Reza Fathollahzadeh

Deepak Sharma

University of Technology, Sydney

PRODUCTIVITY ANALYSES OF ENERGY FIRMS

Leporello Room

Lubos Pavlas, Presiding

Chairman & CEO

Prazska Teplarenska A.S.

Risk Ranking and Selection of Licensed Subjects

Martin Benes Oldrich Starý

Czech Technical University in Prague

Organizational Forms, Competences and Industrial Strategies: The Relations Between Manufacturers and

Operators in the European Wind Energy Sector

Pierre Taillant

CREDEN-LASER

University of Montpellier I

Multi-Sector Comparison of Productive Efficiency in Time Series: An Application of Data Envelopment Analysis to Japanese Electric Power Utilities in the 19906

Mika K. Goto

Hiroko Takahashi

Socio-Economic Research Center

Central Research Institute of Electric Power Industry (CRIEPI)

Benchmarking for Government Owned Utilities in Emerging Markets

Shakeb Afsah

Mary C. Webster

International Resources Group

MARKET-BASED APPROACHES TO ENVIRONMENTAL REGULATION IN THE ENERGY SECTOR

Zerlina Room

Eliska Kotikova, Presiding Project Manager

CityPlan Ltd.

Inefficiency and Price Distortion in the International **Emissions Trading Market** 

Akira Maeda

Assistant Professor

Keio University

Market Based Environmental Regulation in the Restructured Australian Electricity Industry

Iain F. MacGill

Karel Nolles

**Hugh Outhred** 

The University of New South Wales

Assessing Voluntary Commitments: Monitoring is Not Enough!

Manuel Frondel Christoph Böhringer

ZEW - Centre for European Economic Research

 ${\it The Potential for Creating Pollution Credits in a U.S.}$ Statewide "Public Benefits" Energy Efficiency Program

David Sumi

Karl Hausker

PA Consulting Group

Pat Meier

State of Wisconsin

## **CONCURRENT SESSIONS – 21 TO 25**

Saturday, June 7 9:00 - 10:30 am

#### THE SECURITY OF ENERGY SUPPLIES AND INFRASTRUCTURE

Zerlina Room

Carlo Andrea Bollino, Presiding

Universita Degli Studi di Perugia

How Secure is Supply in a Liberalised European Electricity Market?

Mark Lijesen

Arie ten Cate

CPB, Netherlands Bureau for Economic Policy Analysis Energy Security and Regional Cooperation in Asia

Ken Kovama

General Manager, Energy Strategy Department

Institute of Energy Economics, Japan

Improving Energy Infrastructure Security: Costs and Consequences

University of California Berkeley

Hisham Zerriffi

Carnegie Mellon University

Held Hostage: Arms and Infrastructure

Samuel A. Van Vactor

President

Economic Insight, Inc.

22 ENERGY POLICY ISSUES

Donna Elvira Room

Leonard L. Coburn, Presiding Director, Russian & Eurasian Affairs

U.S. Department of Energy

The New Italian Energy Policy: A Forecast by the CEPRIG Model

Enzo Di Giulio

Stefania Migliavacca

Eni Corporate University

Alessandro Vaglio

University of Bergamo

Structural Change in Energy Use and Its Implications on The Effectiveness of Energy Policy: The Case of Taiwan

Shih-Mo Lin

Su-Pin Liu

Chung Yuan Christian University, Taiwan

Building Better Energy Markets: What Next?

**Boyko Nitzov** 

Senior Investment Expert

The Energy Charter Secretariat

Interactions Between the Green Certificate and Electric Power Markets in a Non-Competitive Government Regulated Environment

E. Ariel Bergmann

**Economics Department** 

University of Glasgow

23 TECHNOLOGY AND ENERGY EFFICIENCY

Donna Anna Room

Miroslav Pise, Presiding Managing Director

EON Bohemia S.r.o.

Financing Micro Generation: Some Options for the

Future

Jim Watson

Research Fellow

University of Sussex

Increasing the Eco-Efficiency and Economy of an Energy System: A Multiobjective Optimization Approach

Carlos E. Escobar-Toledo

Professor, Faculty of Chemistry

National University of Mexico

Steps Towards a 2000 Watt/cap Society - A White Paper on Research and Development of Energy-efficient Technologies and Entrepreneurial Innovations

**Eberhard Jochem** 

CEPE ETH Zürich

D. Favrat

**EPFL** 

K. Hungerbühler Ph. Rudolph v. Rohr

D. Spreng **ETHZ** 

A. Wokaun

PSI

M. Zimmermann

**EMPA** Renewable Energy Financing; What Can We Learn From Experience?

**Jyoti Prasad Painuly** 

Riso National Laboratory

**Norbert Wohlgemuth** University of Klagenfurt

24 ELECTRICITY MARKET LIBERALIZATION:

THE EUROPEAN EXPERIENCE Don Ottavio + Masetto Rooms

Georg Erdmann, Presiding

Full Professor

TU Berlin

Competition in the Baltic Electricity Markets

**Arvydas Galinis** Lithuanian Energy Institute

Jens Hauch

Thomas Engberg Pedersen COWI A/S

Hans Ravn

Elkraft System a.m.b.a. Liberalisation of the European Electricity Markets -International Electricity Trade in Europe from a German Perspective

Clemens Cremer

Harald Bradke

Fraunhofer Institute Systems & Innovation Research

Integrating Intermittent Energy Sources in Liberalized Electricity Markets: From Technical Costs to Economic Penalties as a Result of Market Rules

Philippe Menanteau

**Dominique Finon** 

Marie-Laure Lamy

IEPE/CNRS University of Grenoble, France

> The Liberalization of the European Electricity Market(s): An Unstrurctured Restructuring Process

Rudi Hakvoort

François Boisseleau

Delft University of Technology

#### SUPPLY-SIDE ISSUES IN CRUDE OIL AND NATURAL GAS MARKETS

Leporello Room

Ronald Soligo, Presiding

Professor of Economics Rice University

Resource Scarcity: Evidence from Values of Oil and Natural Gas Reserves

M.A. Adelman

Massachusetts Institute of Technology

G.C. Watkins

University of Aberdeen

Optimising Oil and Gas Recovery from a Mature Province: The Case of the UKCS

Alex Kemp Linda Stephen Sola Kasim

University of Aberdeen

Optimization of Gas Supply in Iran (Projection vs. Facts)

Shahla Khaleghi

**Energy Economist** 

National Iranian Gas Company

World Oil Production Peak – A Supply-Side Perspective

**Roger Bentley** 

The University of Reading

Michael R. Smith

EnergyFiles Limited

#### **CONCURRENT SESSIONS – 26 TO 30**

Saturday, June 7 1:30 - 3:00 pm

### APPROACHES TO ELECTRICITY AND NATURAL GAS REGULATION

Zerlina Room

## Fereidoon P. Sioshansi, Presiding

President

Menlo Energy Economics

Time-of-Use Electricity Pricing Should Be Mandated As A Public Good

#### Jeffrey M. Jakubiak

Associate Attorney

Troutman Sanders LLF

Deregulation and Monopoly Profits in New Zealand's Gas and Electricity Sectors

## **Geoff Bertram**

School of Economics & Finance

Victoria University of Wellington, New Zealand

Dutch Price and Quality Regulation System

Virendra Ajodhia

Delft University of Technology

Bart Franken

KEMA Consulting

Carel van der Lippe

**Dutch Energy Regulator** 

Establishment of Regulatory Price Controls and Benchmarking Electricity Networks in the Republic of Slovenia

Irena Glavic

Majda Paripovic

**Bojan Kuzmic** 

Energy Agency of the Republic of Slovenia

**Konstantin Petrov** 

Gian Carlo Scarsi

**KEMA Consulting** 

Stefan Ivanjko

**EIMV** 

#### EUROPE LOOKS EAST: THE EU AND ENERGY IN EASTERN EUROPE AND CENTRAL ASIA

Don Ottavio + Masetto Rooms

Robert E. Borgstrom, Presiding

Independent Consultant

East European Natural Gas Markets: Opening to Competition

## Margarita Pirovska

Graduate Student

Université Paris IX – Dauphine

EU Energy Policy and Future European Energy Markets: Consequences for the Central and East European States

#### Margarita M. Balmaceda

Davis Center for Russian & Eurasian Studies Harvard University

Uzbekistan - An Expanding and Capital-Hungry Economy: Specific Inter-Related Opportunities in Energy, IT and Agriculture

#### Malika Saidkhodjaeva

Associate Professor

Tashkent State Technical University

Building the Euro-Asian Energy Bridge

#### **Paul Tempest**

Executive Director

Windsor Energy Group

#### 28 SOME CONSEQUENCES OF LIVING IN A CARBON-CONSTRAINED WORLD

Donna Anna Room

#### Steffen Sacharowitz, Presiding

TU Berlin

Will European Industry Escape the Kyoto Protocol?

A.J.G. Manders

Johannes Bollen

Henri de Groot

**Paul Tang** 

Herman Vollebergh

Cees Withagen

CPB, Netherlands Bureau for Economic Policy Analysis

The Kyoto Protocol and the Japanese Power Companies

#### Hiroyuki Okamoto

Professor, College of International Relations

Nihon University

Allocation of Refinery CO, Emissions to Oil Finished Products: A New Approach

## Denis Babusiaux

Axel Pierru

Institut Français du Pétrole

Nuclear Power Position in Future Energy Policy, Japan - Roles of Government and Electric Power Companies in Private Sector

#### Taizo Havashi

Faculty of Social and Environmental Studies Fukuoka Institute of Technology

#### THE PROFITABILITY OF ENERGY FIRMS: THEORY AND MEASUREMENT

Donna Elvira Room

Peter K. Nance, Presiding

Principal

Teknecon Energy Risk Advisors LLC

Integration or Atomisation?

#### Robert Arnott

Research Fellow

Oxford Institute for Energy Studies

Valuation of International Integrated Oil Companies: The Use of Financial and Operational Indicators

## Ole Gjolberg

Agricultural University of Norway

#### Thore Johnsen

Norwegian School of Economics & Bus. Admin.

## Klaus Mohn

Statoil ASA

## Petter Osmundsen

Stavanger University College

Current Performances of the Firm and Financial Markets' Evaluations: Does the Ownership Matter in the Electricity Sector?

#### Augusto Ninni

Elisabetta Linares

IEFE.

Bocconi University, Italy

Liberalization of Energy Markets and Company Strategies: A Diagnosis on the European Gas Market

#### Cécile Bazart

C.R.E.D.E.N.

Université Montpellier 1

#### 30 PRICING ISSUES IN ENERGY MARKETS

Leporello Room

## G. Campbell Watkins, Presiding

Professor

University of Aberdeen

Effective or Ineffective?: Examination of the Saudi Pricing Policy in the Atlantic Europe Between 1988 and 2001

#### Kazushi Uemura

Professor of Economics

Sophia University

Evaluating the Effects of Crossholdings and Information on Wholesale Energy Prices

## Augusto Rupérez Micola

Derek W. Bunn

London Business School

Asian Premium of Crude Oil and Importance on Preparation of Oil Market in Northeast Asia

#### Yoshiki Ogawa

General Manager, 2nd Research Dept.

Institute of Energy Economics, Japan

Energy Price Distortions in Iran

#### Alimorad Sharifi

Isfahan University

Mehdi Sadeghi

Imam Sadiq University

Optimal Pricing of Petroleum With Budget Constraint and Externality

#### Chung-Huang Huang

National Tsing Hua University

Hsing-Hua Lin

Ching-Yun Institute of Technology

#### Han-Pang Su

National Taiwan University

## **CONCURRENT SESSIONS – 31 TO 35**

Saturday, June 7 3:30 - 5:00 pm

## 31 INVESTMENT IN ELECTRICITY MARKETS

Zerlina Room

Hamilcar Knops, Presiding

International Institute of Energy Law

Leiden University New Dynamics of Forecasting Load and Prices: Assessing Value of Assets & Future Contracts in Competitive Wholesale Electricity Markets

## Fereidoon P. Sioshansi

President Menlo Energy Economics

The Decision of Investment and its Funding in an Undergoing Institutional Environment: The Case of a

## Nuclear Equipment

Marie-Laure Guillerminet

Department of Economics

University of Montpellier I Changing Investment Incentives in a Deregulated European Electricity Market: The Case of Increasing Transmission Capacity Between Sweden and Germany

Anna Krook-Riekkola Erik O. Ahlgren

Ingrid Nystrom Chalmers University of Technology

The Investment Paradox in Competitive Electricity Markets - Problem Formulation, Empirical Evidence and Solution Strategies

## Christoph Weber

Institute for Energy Economics and the Rational Use of Energy (IER)

The Investment Effectiveness Evaluation in Power

University of Stuttgart

Engineering Under Market Conditions

Waldemar Kamrat Dept. of Electrical Power Engineering Gdansk University of Technology

#### 32 ENERGY DEMAND ANALYSIS

Donna Elvira Room

## Huei-Chu Liao, Presiding

Associate Professor Tam Kang University

Fuel- Switching Capability

## Alain Bousquet

Norbert Ladoux

Université des Sciences Sociales de Toulouse

The Heat Is On: The Changing Role of Weather on Residential Energy Demand

## David L. Ryan

André Plourde

University of Alberta

The Future of North-Western Mediterranean Natural Gas Demand – Econometric Evidence

#### Hadi Hallouche

**Michael Tamvakis** 

CASS Business School

City University, London

Decomposition of Manufacturing Energy Use in OECD Countries: How Do Recent Developments Compare to Historical Long-Term Trends?

#### Fridtjof Unander

Senior Analyst/Principal Administrator

International Energy Agency

#### 33 MORE CONSEQUENCES OF LIVING IN A CARBON-CONSTRAINED WORLD

Donna Anna Room

#### Robert Arnott, Presiding

Research Fellow

Oxford Institute for Energy Studies

Strategic Energy Pricing and Carbon Taxing under Uncertainty about Global Warming

#### Franz Wirl

Professor

University of Vienna

Bio-Energy with Carbon Storage (BECS): A Sequential Decision Approach to the Threat of Abrupt Climate Change

#### Peter Read

Peter Read Consultancy Ltd.

#### Jonathan Lermit

**Energy Consultant** 

Perspectives for the Diffusion of Natural Gas, Renewable Energies and Energy Efficiency in a CO, Mitigation Framework: The Case of Switzerland up to 2010

#### Martin Jakob

#### Reinhard Madlener

**CEPE** 

ETH-Zentrum WEC C

Kyoto and the Electricity Production in US and Canada

#### Jean-Thomas Bernard

Frédéric Clavet

Jean-Cléophas Ondo

Université Laval

#### ISSUES AFFECTING MARKETS FOR CRUDE OIL AND REFINED PRODUCTS

Leporello Room

#### Musa M. Essayyad, Presiding

Department of Finance & Economics

King Fahd University of Petroleum & Minerals

#### Too Many Leasing Decisions in the Oil Industry?

Magne Emhjellen Petoro AS

Kiell Løvas

Statoil

The Impact of Oil Industry Liberalization on the Efficiency of Petroleum Fuels Supply for the Domestic Market in Indonesia

#### Dr. Kurtubi

Senior Staff to Executive VP Development PERTAMINA, Indonesia

Oil Price Shock: A Non-linear Approach

#### Rebeca Jiménez-Rodríguez

Dpto. Fundamentos del Análisis Económico

Universidad de Alicante, Spain

The Geographical Oil Consumption-Production Mismatch: Its Growth and Possible Growing Pains

#### Bernard A. Gelb

Specialist in Industry Economics Congressional Research Service

#### 35 BACK TO THE FUTURE?: THE SECURITY OF ENERGY SUPPLY

Don Ottavio + Masetto Rooms

#### Denis Babusiaux, Presiding

Directeur Scientifique en Economie

Institut Français du Pétrole

Security of Energy Supply: Historical Evidence and Future Prospects

#### Machiel Mulder

CPB, Netherlands Bureau for Economic Policy Analysis Aad Correlje

Delft University of Technology

Could Strategic Gas Reserves Help EU Security-of-Supply?

#### Ole Gunnar Austvik

Economist

Lillehammer University College

The European Union's Security of Energy Supply and Russian Gas

#### James Chalker

Amsterdam Law School

Universiteit van Amsterdam

The EvrAzEs and Eurasia's Energy Security

#### **Gregory Gleason**

Professor of Political Science & Public Admin.

University of New Mexico

#### **POSTER SESSION - 1**

Thursday, June 5 4:00 - 5:00 pm

#### TECHNOLOGY ISSUES IN ENERGY PRODUCTION AND USE

Board No. 1

The Empirical Assessment of Technology Differences: Comparing the Comparable

#### Manuel Frondel

ZEW - Centre for European Economic Research

#### Christoph M. Schmidt

Rheinisch-Westfälisches Institute fur Wirtschaftsforschung

Roard No. 2

Energy Densities: Evolutionary Aspects and Policy **Implications** 

#### **Bruno Fritsch**

Professor Emeritus

Swiss Federal Institute of Technology Zürich

Board No. 3

Design for the Optimum Energy System Having Small Nuclear Power in Japan

## Toshihiko Nakata

Shuichi Ashina

Management of Science and Technology

Tohoku University

Board No. 4

Strategy for Nuclear Fuel Cycle in an Uncertain Situation: A Model Analysis Focusing on the Uncertainty about Technological Progress

## Takayuki Takeshita

Kenji Yamaji

Yasumasa Fujii

Department of Advanced Energy

The University of Tokyo

Board No. 5

Entry Mechanisms of Energy Actors in the Telecommunications Industry

#### Carole Le Henaff

**CGEMP** 

Université Paris IX - Dauphine

Board No. 6

Energy Trade and Grid in the Northeast Asia: System for the Better Decision Making

#### Fumio Arakawa

**Executive Senior Engineer** 

Global Engineering Institute, Inc.

## POSTER SESSION - 2

Friday, June 6 10:30 - 11:30 am

Board Room 1

#### ENERGY EFFICIENCY AND SUSTAINABLE DEVELOPMENT

Board No. 1

Increase in Environmental Restrictions as a Leverage to GTL Projects

#### Edmar Luiz Fagundes de Almeida

Professor, Institute of Economics

Federal University of Rio de Janeiro

Board No. 2

Assessment of Market Systems for CO, Emissions Trading as Environmental Policy Options, with Special Emphasis on Evaluation of Intertemporal Trading

## Kazuya Fujime

Managing Director

The Institute of Energy Economics, Japan

#### Board No. 3

DEA Efficiency in the Finnish District Heating Companies

#### Päivi Peltola

Department of Business and Economics

University of Joensuu

Board No. 4

The 96/61 Directive (IPPC) and the Role of Best Available Techniques in the Energy Field

## Maria Proto

Stefania Supino Ornella Malandrino

University of Salerno, Italy

Board No. 5

Changes of Energy Efficiency in Countries in Transition and Their Assessment in Forecasting Energy Demand

#### Vaclovas Miskinis

Jurgis Vilemas

Lithuanian Energy Institute

Board No. 6

Fuel Poverty in Europe: A Cross-Country Analysis Using A New Composite Measurement

#### John D. Healy

Urban Institute of Ireland University College Dublin

#### **POSTER SESSION - 3**

Friday, June 6 4:00 - 5:00 pm

Board Room 1

#### FOCUS ON ISSUES IN OIL AND GAS MARKETS

Roard No. 1

Bertrand Competition with Entry and Asymmetric Information

#### Corinne Chaton Laurent David

Gaz de France

Board No. 2

Corporate Governance and Performance: Case of Oil Companies

#### Rym Hachana

PhD Student in Economics

Université Paris IX - Dauphine

Board No. 3

The Transformation of European Energy Markets and Energy Taxation Incentives

#### Frank Asche

**Odd Bjarte Nilsen** Petter Osmundsen

Ragnar Tveteras

Stavanger University College

Board No. 4

An Alternative Government Oil Stockpile Strategy: The Empirical Study in Taiwan

## Huei-Chu Liao

**Economics Department** 

Tamkang University

Board No. 5

Mergers in Energy Markets: The Case of E.ON-Ruhrgas

#### Kai Hueschelrath

Institute for Industrial Organization, Germany

Kai Rommel

Technical University Cottbus, Germany

Board No. 6

Regulation by Duopoly Under Political Constraints

#### Jose Eduardo Mendoza Contreras

Neil Rickman

University of Surrey

#### POSTER SESSION - 4

Saturday, June 7 10:30 - 11:30 am

Board Room 1

#### DEVELOPMENTS IN ELECTRICITY MARKETS

Board No. 1

Competition with Power: Experiences of a Local Utility Company with Five Years of Market Liberalisation in Germany

#### Dirk Buennagel

Assistant to the Board of Directors

Stadtwerke Duesseldorft AG

Board No. 2

Potential for Market Power in the German Electricity Market?

## Christian Hewicker

Konstantin Petrov

**KEMA Consulting** 

Board No. 3

Development of Model for the Simulation of Marginal Losses in the Transmission Grid

## Mindaugas Krakauskas

Ausra Pazeraite

Lithuanian Energy Institute

Board No. 4

Development of Electricity Market in Lithuania and the Raltics

#### Vidmantas Jankauskas

National Control Commission for Prices and Energy, Lithuania

Roard No. 5

The Question of Generation Adequacy in Liberalized Electricity Markets

#### Laurens de Vries

Rudi Hakvoort

Delft University of Technology

## **OPENING RECEPTION — CLUB LAVKA**

The Welcome Reception will be held at Club Lavka from 6 to 8pm on Wednesday, June 4. Situated next to the Charles Bridge, this restaurant has unmatched views of Prague Castle and the Charles Bridge. Lavka's central location in the Old Town of Prague will enable everybody to visit any of hundreds of other refreshment places, watering holes, restaurants, etc. where socializing and networking never stops. Both indoor and outdoor seating areas are available, depending on the weather. Food, wine, and beer will be served, and your coming will guarantee excellent company.

## PRAGUE GALA DINNER

The French Restaurant in the Municipal House is often rated as one of the most beautiful restaurants in the world. This restaurant will serve as the backdrop for the Prague conference Gala Dinner. The Municipal House was built on the former King Wenceslas' IV court, opening in 1910. The building has been restored and kept close to its original appearance. The stucco decorations, wooden wainscoting, original tables and furniture assure it's historical appeal. Allegorical scenes painted on a sidewall, original wallpaper and other decorations create a special atmosphere. Today's patrons of The French Restaurant tend to escape the contemporary hustle of the new millennium and opt to return almost 100 years to the days when Art Nouveau ruled in Prague. Registered delegates are invited to the Gala Dinner where they will be surrounded by unique details created during the most significant period of Czech artists, including the present with the restaurant's chef, Mr. Jiri Kral, winner of many international culinary competitions. Enjoy not only the beauty of The Municipal House, but also the tastes of an award-winning chef, while you mingle with other energy colleagues for an evening of history, beauty and fine cuisine.

## **Conference Information**

(Have Any Conference Questions? - Call 216-464-5365 for Answers)

#### HOTEL RESERVATION / INFORMATION

The Dorint Don Giovanni Hotel, the conference venue, is conveniently located near the business district and Prague city attractions. We have a special room block at the following rates per night:

Single/Double Room Euro 151 Expect More Room Euro 171 (Executive Floor)

These special rates apply for occupancy May 29 – June 11, 2003, leaving you plenty of time before and after the conference to enjoy Prague. Please note that you **MUST** make your reservations prior to Thursday, May 15, 2003, to receive these special rates. Reservations placed after May 15, will be confirmed at the group rate on a space-available basis. Check-in time is 3:00 pm and check-out time is 12:00 noon. For reservations please complete the hotel booking form included in this conference announcement and either fax this to 420-2-6703-6704 (c/o Ms. Denisa Havlik) or email to the attention of Ms. Denisa Havlik at denisa.havlik@dorinthotels.cz

Do not send your Hotel Booking form to the Conference secretariet or IAEE Headquarters. Hotel Booking forms must be sent direct to the Dorint Don Giovanni Hotel in Prague for processing and confirmation.

#### TRAVEL DOCUMENTS

All international attendees to the IAEE International Conference are urged to contact their travel agent regarding the necessity of a Visa and/or Passport documents to gain entrance to the Czech Republic. If you need a Visa make sure you obtain a Business Visa. Allow plenty of time for processing these documents. If you need a letter of invitation to attend the conference, contact IAEE with a fax request at 216-464-2737. Please provide your return fax number so that we may promptly respond to your request. Note that IAEE does not have funds to sponsor participant's registration, travel or hotel/transportation costs, etc. in conjunction with this meeting.

## AIR TRANSPORTATION

CSA – Czech Airlines – is the official carrier of the 26<sup>th</sup> Annual IAEE International Conference. CSA offers a 15% discount from applicable economy class fares and a 25% discount from business class fares for participants of the conference after checking the registration form in all CSA offices worldwide. The discount will be valid for journeys during the following period: 7 days before the beginning of the conference – 7 days after the end of the conference. The discount is not valid for flights OK 3000 – OK 4999. Please contact your nearest CSA office when booking your flight to Prague after December 1, 2002.

To receive these special discounts please contact your nearest CSA office. You will need to provide them with the title of the conference: "26th Annual IAEE Conference" and email your confirmation of registration for the conference. Click on www.czechairlines.com for more information on CSA services, timetables and a list of offices worldwide.

#### **GROUND TRANSPORTATION**

A good metro system, as well as trams and buses serve the city and its suburbs. Metro and tramlines crisscross the city in all directions, while buses generally serve suburban areas, often running from metro station to areas between and beyond metro lines. Tickets can be purchased in metro stations and in newsstands, but not on board a bus or tram. A special deal has been negotiated for conference delegates. For approximately US\$2.00, delegates can obtain a 4-day pass valid for all modes of public transportation – an excellent value! Discount transportation tickets may be purchased at the IAEE Registration Desk.

The Hotel DORINT Don Giovanni is conveniently located just above the metro station ZELIVSKEHO, four metro stops from the city center. It takes about 10 minutes to get to downtown. Also, the tram station is located nearby. Basically, no taxi or car rental is necessary in Prague, except for the period between midnight and 5am, when the metro does not run. During this period, only tram and buses are available.

Transport from the airport to the hotel: A subsidiary of Czech Airlines, AIRTOURS will provide a shuttle bus between the airport and hotel for selected CSA flights on June 4, 2003. Otherwise, taxis can be hired at the airport. The trip to the Hotel DORINT is approximately US\$20.00.

#### **DISCOVER PRAGUE**

Prague or "The Mother of Cities" is steeped in treasures both past and present. In the heart of the historical Bohemian region of central Europe, visitors are treated to history at every turn; the Jewish quarter, the National Gallery, Old Town Square, Charles Bridge, Wenceslas Square and the Lesser Quarter. There is no limit to the amount of history bestowed upon the towers of The Prague Castle and St. Vitus Cathedral.

The Czech Republic's capital city is located on the Vltava (Moldau) River. Prague offers the traveler a view of all the major architectural styles of Western European history. Prague's buildings are well preserved, as they have been relatively free of major wars.

Be sure to leave a few days both pre and post of the conference to allow for time to take in all that Prague has to offer. Walk the Royal Route: Prague Castle (containing walls more than a millennium old and current home of the Czech president). Within the walls of Prague Castle you can visit St. Vitus Cathedral, the Royal Palace and St. George's Basilica, which is now an art gallery. Before leaving the castle, wander through Golden Lane, an alley of 16 tiny houses built along a former castle wall named for the goldsmiths once employed by the Emperor.

Stroll across Charles Bridge built in the mid-14<sup>th</sup> century by Charles IV. The bridge is open to pedestrians only. Take your time to enjoy the view and discover the significance of the monarch's use of astrologers to time the building of the bridge to be at the most appropriate time. Speaking of time, just over the bridge, in Old Town Square, you'll find the astrological clock with performances at the top of each hour depicting the march of the twelve apostles. Wolfgang Amadeus Mozart walked the streets of Old Town and conducted the premiere of *Don Giovanni* within its borders.

If all your touring hasn't left you exhausted, you can find some good buys while shopping. Blood-red garnets are the official Czech national gem, fine crystal has been produced in Bohemia since the 14th century, antiques including books and prints are readily available, local beer is a bit heavy to carry home, but you can take home a taste of Prague with Becherovka, the country's popular herbal liqueur.

Prague has a tradition for theater. Prague's leading theaters include: the National Theatre, the State Opera, the Estates' Theatre and the Magic Lantern. You can choose between many performances such as dance, drama, music or a musical. Wherever you choose, you can be sure that you are sitting where history was made.

To plan your time both pre and post of the conference, be sure to check out the following websites: www.czech.cz, www.centraleurope.com/ceo/czech, www.pis.cz or www.prague-info.cz These should be useful for general tips, city highlights and travel information.

## CLIMATE

Prague's weather in June is usually nice, although rain or showers are possible. The average temperature at the time of the conference is usually around 70F / 21C but you may find cooler evenings and hotter days. Be sure to check out the weekly forecast at: http://www.weather.com/outlook/travel/local/EZXX0012

#### WHAT TO WEAR

This year's conference attire is business dress. This includes suits and ties for gentlemen; skirts, nine-to-five dresses and pantsuits for ladies. (Please note: Although the temperatures outside may be warm, often the air-conditioning indoors warrants a light sweater or jacket.)

# Registration Form NEW CHALLENGES FOR ENERGY DECISION MAKERS

June 4-7, 2003 • Hotel Dorint Don Giovanni, Prague, Czech Republic

**REGISTRATION FEES** are payable in advance. Complete the form below and mail to IAEE Conference Headquarters along with your check payable to IAEE in U.S. dollars and drawn on a U.S. bank. Conference registration fees may be wire transferred. Fax 216-464-2737 for wire transfer information. Hotel and related travel costs are not included in registration fees. Registration fees include: registration materials, a copy of the conference proceedings on CD-Rom, three lunches, four receptions, one dinner and coffee breaks. Students: submit a letter stating that you are a full-time student and are not employed full-time. The letter should provide the name and contact information for your main faculty supervisor or your department chair and a copy of your student identification card. IAEE reserves the right to verify student status.

Check Below	- F	Received on or Before May 3, 2003	Received May 4 to June 1, 2003	Received After June 1, 2003 & Onsite Fee
Below	must be received by 3/3/03	\$ 495.00 US	June 1, 2005	& Ollsite Pet
	IAEE Members	570.00 US	\$ 620.00 US	\$645.00 US
		670.00 US	720.00 US	745.00 US
	Nonmembers (without membership)	705.00 US	755.00 US	780.00 US
	Full Time Students	325.00 US	375.00 US	425.00 US
	Guests (meal functions only; no meeting sessions)	325.00 US	375.00 US	425.00 US
	Proceedings CD Rom - Member	100.00 US	100.00 US	100.00 US
	CD Rom - Nonmember	150.00 US	150.00 US	150.00 US
	Proceedings Print Version - Member	140.00 US	140.00 US	140.00 US
	Print Version - Nonmember	190.00 US	190.00 US	190.00 US
	General Conference Sponsorship	250.00 US	250.00 US	250.00 US
	Student Scholarship Fund Support	50.00 US	50.00 US	50.00 US
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At what hotel will	you be staying (circle one)? Dorint Hotel Other (please	indicate)		
	Check here if you have a disability or special need and may re	· · · · · · · · · · · · · · · · · · ·	icipate.	
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#### CANCELLATIONS/SUBSTITUTIONS

All cancellations and substitutions must be received in writing at IAEE Conference Headquarters. Cancellations received on or before May 3, 2003 are subject to a non-refundable \$250.00 administrative fee. Cancellations received after May 3, 2003 will be honored, however, no refund will be made. There will be no refunds for *no-shows*. There is no exception allowed to this policy. Should you be unable to attend, substitutions may be made to transfer your registration to another member of your organization at any time up to June 1, 2003.

IAEE Conference Headquarters 28790 Chagrin Blvd., Ste. 350 Cleveland, OH 44122 USA

Phone: 216-464-2785; Fax: 216-464-2768 E-mail: iaee@iaee.org

## IAEE 26th International Conference

June 4-7, 2003 • Hotel Dorint Don Giovanni, Prague, Czech Republic IAEE Conference Headquarters 28790 Chagrin Boulevard, Suite 350 Cleveland, OH 44122 USA

Presorted Standard U.S.Postage Paid Richfield, OH Permit No. 82



## HOTEL BOOKING FORM

## 26th IAEE INTERNATIONAL CONFERENCE

04th June 2003 - 07th June 2003

## **DORINT HOTEL DON GIOVANNI**

Vinohradská 157 A, CZ - 130 20 Prague 3 tel.: + 420 2 6703 1111

Please, use one form per delegate. **All reservations must be received on or before May 15, 2003.** Past this date, the rooms will be offered on space available basis and at the group rates listed below. The group rates are valid for occupancy from May 29, 2003 to June 11, 2003.

Please, send this form to the Dorint Don Giovanni Prague to the attention of Meeting & Convention Department, **FAX: + 420 2 6703 6704** or send the form via email to Denisa Havlik: denisa.havlik@dorinthotels.cz

First Name:				
Last Name:				
Company:				
Telephone:				
Facsimile:				
E-Mail:				
Arrival Date:				
Departure Date:				
Arrival Time:				
Credit Card Type & No.:				
Credit Card Holder:				
Expiration Date:				
Authorized Signature:				
I would like to make the following reservation in the hotel:				
Please tick: Single Room, price Euro 151,-/room night				
Please tick: Double Room, price Euro151,-/ room night				
Please tick: Expect More (executive) Room, price Euro 171,-/ room night				
The number of Expect More Rooms is limited to 20 rooms for IAEE.				
Please tick: Please book me a <b>non-smoking room</b> .				
* All rates as listed above include American Breakfast Buffet daily per person. (One				
breakfast per paid room only)				

## IAEE PRAGUE CONFERENCE TECHNICAL AND SOCIAL TOURS

#### TECHNICAL TOUR

## ECKG POWER PLANT AND DISTRICT HEATING IN KLADNO & KRIVOKLAT CASTLE

This tour will demonstrate the most modern Czech power plant (with fluidized bed technology and a gas turbine) that supplies the City of Kladno with district heat. The heat distribution company TEPO (a conference sponsor) is in itself evidence of the successful transformation of the energy market from a central planning to a free market. This power plant is also an important part of the critical infrastructure of Prague's power supply.

Then you will visit Krivoklat Castle, which is one of the oldest and most important castles of the kings of Bohemia. Its beginnings date back to the 12th century. You can admire the magnificent castle chapel, the Royal Hall, and the Hall of Knights with its exhibitions of Gothic paintings and sculptures. There are many other features you will see at Krivoklat Castle, which is a national cultural monument.

A bus will depart the Dorint hotel at 9:00am on Wednesday, June 4 and drop participants off in front of Club Luyka for the conference Opening Reception at 5:00pm.

**Duration**: 8 hours

Transport by coach, snack, guide Services:

Price per person: 33 Euro

If you wish to take part in this technical tour please contact Ms. Monika Mechurova by phone at +420-234 125 232 or monika.mechurova@cityplan.cz

## **SOCIAL TOURS**

## GRAND CITY TOUR OF PRAGUE

The basic standard sightseeing to help you set general impressions of the "Golden City". This tour shows the most famous parts of Prague - the Old Town with Rudolfinum and Old Town Square, Charles Bridge and of course the most beautiful part - Hradcany including the Loretto Church, Royal Palace, St. Vitus Cathedral, St. George Church and the Golden Lane. The tour continues to the New Town to the Wenceslas Square - famous shopping area.

**Duration**: 3,5 hours

transport by coach, partially by Services:

walking, guide

Price per person: 18 Euro

## JEWISH QUARTER WALKING TOUR

First part of the tour includes the highlights of the historical Prague - Old Town with the Astronomical Clock, Tyn Church. In the famous Jewish Quarter also called Josefov, first the visitor get acquainted with the history of the former Ghetto and the Old New Synagogue, the tour shows the Jewish cemetery, visiting also some of the synagogues. Visitors are also informed about Franz Kafka and his native house is shown to them during this tour.

**Duration**:

entries to Jewish Quarter, guide Services:

Price per person: 22 Euro

#### KARLSTEJN CASTLE

A half-day tour takes you approximately 35 km south-west from Prague to the medieval Castle Kirsten. This mighty construction has been built 1348 under Emperor Charles IV. It has never been conquered and it was here, where for several centuries the Crown Jewels and all important documents were kept. The Castle entrance is reachable after 15 minutes walk uphill from the parking lot. During a comprehensive guided tour fortifications and rooms of this impressive castle will be seen. After the visit return to Prague.

Duration: 4.5 hours

Services: transport by coach, guide, and

entrance fee

24 Euro Price per person:

#### PILSNER BREWERY

Beer has been brewed in Pilsen since 1295. But the Pilsner beer has the name of the Prazdroj brewery (Pilsner Urquell), which was built in 1842. During this tour you will understand how real Pilsner was brewed and drunk in the past, how real Pilsner is brewed and how real Pilsner is drunk.

Duration: 7 hours

bus, guide, entrance fee Services:

Price per person: 41 Euro

We have arranged special discounts for IAEE delegates. To make reservations for any of the above social tours contact:

CSA Airtours.a.s Kolejni 2 160 00 PRAHA 6 Phone: +420 2 20104521523 Fax: +420 2 20104526

E-mail: mail@airtours.cz

## "SURVIVORS PARTY" — "U FLEKU" BREWERY AND RESTAURANT

The conference closing "Survivor's Party" will be held at U Fleku on Saturday, June 7, between 8pm and midnight. This place goes back to the 15th century and the beer served is brewed on the spot. It is a dark malty beer that goes well with hearty meals to be served at the party. Despite many centuries, the rooms are almost still in their original state. The food has improved since then, though it's not exactly diet food. Roast beef, roast pig, fish, and other treats will be waiting for your stomachs. Local schnapps will be a certain delight for connoisseurs. Dress: White tie, Black tie, business suit, jeans, shorts, anything will do. All we need is your presence, and we will foot the bill regardless of how much beer you drink and food you eat. Transportation will be provided to and from the Hotel Dorint.