

# **53rd Meeting** of the EWGCFM

and 2nd International Conference of the RCEM

May 22-24 2014 Chania, Greece

1-day workshop: Commodities and Policy Implications











EURO Working Group for Commodities and Financial Modelling

#### Conference Organisers:





#### Sponsors:







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# **Welcoming Note**

Dear Colleagues and Friends,

We would like to welcome all of you to the 53rd Meeting of the Euro Working Group on Commodities and Financial Modelling [EWGCFM] and 2nd Conference of the Research Centre for Energy Management (RCEM) at ESCP Europe Business School, co-organized and hosted by the Technical University of Crete.

The meeting aims to provide a forum for researchers and practitioners to exchange ideas and to present new research results on the theory and modern practice of modelling, risk management, asset pricing, energy and environmental management, with also a focus on commodities modelling and regulation within the framework of our workshop "Commodities and Policy Implications".

It is an undeniable fact that we are entering a new era with increased global demand for energy, dwindling fossil fuels supplies and rising concern for induced environmental burdens and climate change effects. Other related issues involve fuel prices volatility, markets deregulation and geopolitical instabilities. This explosive mixture sets demanding prerequisites for people dealing with energy related issues: specially trained experts are necessary along with people with different backgrounds (namely from industry and universities), technicians and modellers. The challenge is not only scientific or technological but also managerial. Apart from important policy decisions in the energy sector, a global goal to sustain energy supplies, improve efficiency and develop new sustainable energy sources will demand technological innovations, capital funding and expertise in various aspects of management (i.e. energy related, human resources, supply chain, etc.). Moreover, the application of operation research methods is important in striving to resolve the conflicts between the various competing goals in pursuit of economic prosperity, environmental quality, social equity and technological efficiency. We believe that this conference will provide a unique opportunity for interchanging new ideas, having fruitful discussions on our common fields of interest, meeting old friends and making new colleagues.

The Organizing Committee has worked hard to ensure the success of this Conference, and we think that we have achieved our goal. Overall, from over 100 submissions, 75 papers were selected for presentation and inclusion in the final scientific programme. These are organized in 14 concurrent sessions. It is an honour for us to welcome our four guest speakers: Panos M. Pardalos, Distinguished Professor of Industrial and Systems Engineering at the University of Florida and Editor in chief of the Journal of Energy Systems; Richard Tol, Professor at the Department of Economics, University of Sussex and Editor in chief in Journal of Environmental Economics; Derek Bunn, Professor of Decision Sciences, Management Science and Operations at the London Business School and Editor in chief of the Journal of Energy Markets; Michael Jefferson, Affiliate Professor of Energy Policy at ESCP Europe Business School and Editor in chief of the Journal Energy Policy.

Our guest speakers will intervene in plenary sessions: Professor Panos M. Pardalos on Thursday at 12:45, Professor Richard Tol on Friday at 11:30, Professor Derek Bunn on Friday at 17:15 and Professor Michael Jefferson on Saturday at 12:30. The programme also includes a Round Table discussion with invited speeches by Konstantinos Ksifaras (CEO of DESFA) and Javier Suarez (Mediobanka Securities UK). We are sure that all participants will enjoy the rich scientific part of the conference and will find useful new ideas for their current and future research.

We would also like to deeply thank the members of the Scientific Committee for their help in selecting the papers to be included in the programme. Special thanks are also due to the conference secretariat Mrs Alexandra Maragkogianni and the RCEM's PhD student Mrs Georgia Makridou for their hard work which was vital for the successful organization of the Conference.

We hope that you will find the scientific program highly interesting. However, a Conference is not only about presentations, it is also about meeting new colleagues, establishing networks, relaxing and enjoying the surroundings. So, we believe that you will have the chance to enjoy your stay in Chania, discover its beauties and rich history, visit the old town, enjoy the sea and sun, and above all experience the famous Cretan hospitality!

The Organising Committee and Conference co-chairs



Kostas Andriosopoulos, Director of Research Centre for Energy Management at ESCP Europe Business School, UK and General Conference Chair



**Spiros Papaefthimiou,** Technical University of Crete, Greece and Organising Committee Chair



**Constantin Zopounidis,** Technical University of Crete, Greece & Audencia Group School of Management Nantes, France and Scientific Committee Chair





# **53rd Meeting** of the **EWGCFM**

and 2nd International Conference of the RCEM

May 22-24 2014 Chania, Greece

1-day workshop: Commodities and Policy Implications

## Keynote speakers

#### Panos M. Pardalos, Editor, Energy Systems; Professor, University of Florida

Panos M. Pardalos serves as Distinguished Professor of Industrial and Systems Engineering at the University of Florida. He is also an affiliated faculty member of the Computer and Information Science Department, the Hellenic Studies Center, and the Biomedical Engineering Program. He is also the Director of the Center for Applied Optimization. Dr. Pardalos is a world leading expert in global and combinatorial optimization. His recent research interests include network design problems, optimization in telecommunications, e-commerce, data mining, biomedical applications, and massive computing.

#### Prof. Richard Tol, Editor, Energy Economics; Professor, University of Sussex

Richard S.J. Tol is a Professor at the Department of Economics, University of Sussex and the Professor of the Economics of Climate Change, Institute for Environmental Studies and Department of Spatial Economics, Vrije Universiteit, Amsterdam, the Netherlands. Formerly, he was a Research Professor at the Economic and Social Research Institute, Dublin, the Michael Otto Professor of Sustainability and Global Change at Hamburg University and an Adjunct Professor, Department of Engineering and Public Policy, Carnegie Mellon University, Pittsburgh, PA, USA. He has had visiting appointments at the Canadian Centre for Climate Research, University of Victoria, British Colombia, at the Centre for Social and Economic Research on the Global Environment, University College London, and at the Princeton Environmental Institute and the Department of Economics, Princeton University. He received an M.Sc. in econometrics (1992) and a Ph.D. in economics (1997) from the Vrije Universiteit Amsterdam. He is ranked among the top 100 economists in the world, and has over 200 publications in learned journals (with 100+ co-authors), 3 books, 5 major reports, 37 book chapters, and many minor publications. He specialises in the economics of energy, environment, and climate, and is interested in integrated assessment modelling. He is an editor for Energy Economics, and an associate editor of economics the e-journal. He is advisor and referee of national and international policy and research. He is an author (contributing, lead, principal and convening) of Working Groups I, II and III of the Intergovernmental Panel on Climate Change, shared winner of the Nobel Peace Prize for 2007; an author and editor of the UNEP Handbook on Methods for Climate Change Impact Assessment and Adaptation Strategies; a GTAP Research Fellow; and a member of the Academia Europaea. He is actively involved in the European Climate Forum, the European Forum on Integrated Environmental Assessment, and the Energy Modeling Forum.

#### Prof. Derek Bunn, Editor, Journal of Energy Markets; Professor, London Business School

Derek Bunn is currently a Professor at the London Business School and the Editor-in-Chief of the Journal of Energy Markets. Having read Natural Sciences at Trinity College, Cambridge University, he received a PhD from London Business School in 1975 and was subsequently elected CEGB Fellow in Engineering at Oxford University. Occasionally since then he has been a visiting professor at Stanford University in California. Author of over 200 research papers and 10 books in the areas of forecasting, decision analysis and energy economics, he has also been recipient of several professional and industry awards, including the Goodeve Medal of the UK Operational Research Society in 1994. His work has been cited in over 4000 publications and translated into many languages. He has been a regular keynote speaker and chair at international research and practitioner conferences, as well as an advisor to several governments and many companies.

#### Prof. Michael Jefferson, Editor, Energy Policy; Affiliate Professor, ESCP Europe Business School

Michael Jefferson studied at University College, Oxford and then the London School of Economics, before going into an economics consultancy, an industrial policy body, and then becoming Chief Economist of The Royal Dutch / Shell Group. He spent nearly 20 years at Shell in various roles, from Head of Planning in Europe to Director of Oil Supply and Trading.

He then spent ten years as Deputy Secretary-General of the World Energy Council, where he began working with the Intergovernmental Panel on Climate Change as Contributing Author, Lead Author, Editorial Reviewer and Expert Reviewer, culminating in his receipt of the IPCC's certificate for his contributions to their award of the Nobel Peace Prize in December 2007. He has also written extensively on energy policy, including contributions to various UN bodies, and was for many years involved with the World Renewable Energy Network and Congresses.

Alongside his work in business he has written several books in the fields of energy and economics; contributed to books on economic and social history; and written or co-authored many peer-reviewed papers in the energy and environmental field. He is an Affiliate Professor of Energy Policy at ESCP Europe Business School, and a Visiting Professor at University of Buckingham. He is editor of the journal Energy Policy.

## **Invited speakers**

#### Konstantinos Ksifaras, CEO, DESFA

Konstantinos D. Ksifaras is a Production and Management Engineer specialized in Operational Research. He has extended experience as a researcher and business consultant.

He has served as Special Advisor to the Leadership of the Ministries of Development (2005-2006) and the Environment, Energy and Climate Change (2013). He has also served as Director of the Office of the Deputy Minister of Development, Competitiveness, Infrastructure, Transport and Networks, competent for the management of the implementation and the funds absorption of NSRF 2007-2013, as well as, the design of the new programming period 2014-2020. He is Vice President of the National Association of Production Engineering & Management and held until recently the position of the Secretary of the Executive Committee of the Technical Chamber of Greece / Department of Western Crete. He is fluent in English

#### Javier Suarez, Executive Director, Mediobanca

Javier Suarez is executive Director at Mediobanca, responsible for research on the Southern European Utilities (Italy and Iberia). He has been a utilities analyst for over ten years having previously worked at Nomura, Unicredit, Dresdner Kleinwort, ING Barings and Santander Investment. Javier received his Bachelor of Arts in Law (JD) in 1994 and his Bachelor of Science in Business Administration in 1995, both from "Universidad Pontificia Comillas (Icade E-3)" of Madrid (Spain). Furthermore in September 2006 he received in London its Trium Global Executive MBA, jointly issued by New York University Stern (USA), London School of Economics (UK) and HEC School of Management (France). During his professional career Javier has lived and worked in Madrid, London and Milan.

#### Raphael Douady, CNRS and University Paris 1 Panthéon - Sorbonne, France, Riskdata

Raphael Douady is a French mathematician and economist, specialised in financial mathematics and chaos theory. With more than fifteen years experience in the banking industry (risk management, option models, trading strategies) and thirty years research in pure and applied mathematics, Dr Douady is renowned for his highly sophisticated quantitative solutions and statistical analysis. A former fellow of Ecole Normale Supérieure inParis, he earned his Ph.D. in 1982 in Hamiltonian dynamics and became strongly involved in Finance in 1993. Currently affiliated with University of Paris 1-Sorbonne Economic Center (CES) and the French National Center for Scientific Research (CNRS), he has also been appointed International Associate Professor at New York University Polytechnic Institute. He has lead and organized numerous academic, as well as practitioner conferences around the world, including the New York University seminar of Mathematical Finance and Paris Europlace conferences. His most recent research topics are Hedge Funds risks, for which he has developed especially suited powerful nonlinear statistical models, and systemic risk.

Raphael Douady is one of the founders and the research director of Riskdata, a market-leading provider of risk management tools for investors, asset managers, hedge funds, fund of funds, and pension funds. He is also a member of a French "Laboratory of Excellence" devoted to financial regulation (LabEx ReFi), of the Praxis Club, a New York based think tank advising the French government on its economic policy and other related topics and on the "risk committee" of Finance Innovation, a French official entity supporting innovation in financial software.

# **Organising Committee/Conference Co-Chairs**

Kostas Andriosopoulos, ESCP Europe Business School, UK (General Conference Chair)

Spiros Papaefthimiou, Technical University of Crete, Greece (Organising Committee Chair)

**Constantin Zopounidis,** Technical University of Crete, Greece & Audencia Group School of Management Nantes, France (Scientific Committee Chair).

## **Scientific Committee**

Andriosopoulos, D., Strathclyde University, UK; Bertocchi, M., University of Bergamo, Italy; Chevalier, A., ESCP Europe Business School, France; Cole, O., ESCP Europe Business School, UK; Consigli, G., University of Bergamo, Italy; D' Ecclesia, R., Chairman of EWGCFM, Sapienza University of Rome, Italy; Delis, M., Surrey University, UK; De Menezes, L., City University, UK; Dimitropoulos, J., Bloomberg UK; Douady, R., CNRS and University Paris 1 Pantheon-Sorbonne, Riskdata, France; Doumpos, M., Technical University of Crete, Greece; Gaganis, Ch., University of Crete, Greece; Galariotis, E., Audencia Nantes School of Management, France; Gougeon, P., ESCP Europe Business School, UK; Hasan, I., Fordham University, USA; Kanelos, F., Technical University of Crete, Greece; Marcel, V., Chatham House, UK; Mastroeni, L., University of Roma Tre, Italy; Mellios, C., University Paris 1 Panthéon - Sorbonne, France; Molyneux, P., Bangor University, UK; Nomikos, N., City University, UK; Ohana, S., ESCP Europe Business School, France; Papapostolou, N., City University, UK; Pardalos, P., University of Florida, USA; Pasiouras, F., Surrey University, UK & Technical University of Crete, Greece; Pflug, G., University of Vienna, Austria; Pouliasis, P., City University, UK; Salameh, M., World Bank, UK; Soldatos, O., Credit-Suisse, UK; Speranza, M.G., University, UK; Troege, M., ESCP Europe Business School, France; Voudouris, V., ESCP Europe Business School, UK; Wachtel, P., New York University, USA; Zenios S., University of Cyprus, Cyprus.

## **Conference Secretariat**

Alexandra Maragkogianni

Technical University of Crete, Kounoupidiana Campus, Chania, Greece

Tel: +30 28210 37239

E-mail: amaragkogianni@dpem.tuc.gr

## The Venue



#### MINOA Palace Resort & Spa

Platanias, Chania, Crete, Greece, 73014 Tel.: +30 28210 36500 Fax: +30 28210 36555 e-mail: info@minoapalace.gr





The Conference will take place at the MINOA PALACE RESORT & SPA, a luxury 5\* beachside hotel, built within 35.000m2 of maintained gardens. It is situated in the cosmopolitan area of Platanias, 12 km west of the picturesque town of Chania and only 30 min drive from Chania International Airport.

The hotel offers majestic views of its surrounding countryside and the White Mountains. To the north, the hotel enjoys panoramic views of the endless golden beach of Platanias with the shimmering sapphire blue Aegean beyond. With the extension of the hotel in 2008, guests have immediate access to the sandy beach, over the newly built aerial bridge, connecting the two hotel's sections.

The luxury and comfort, combined with the attention to the detail and the relaxed atmosphere, provide a holiday to remember for a lifetime!

## **Conference Dinners**

#### Welcome reception (22nd May, 2014)

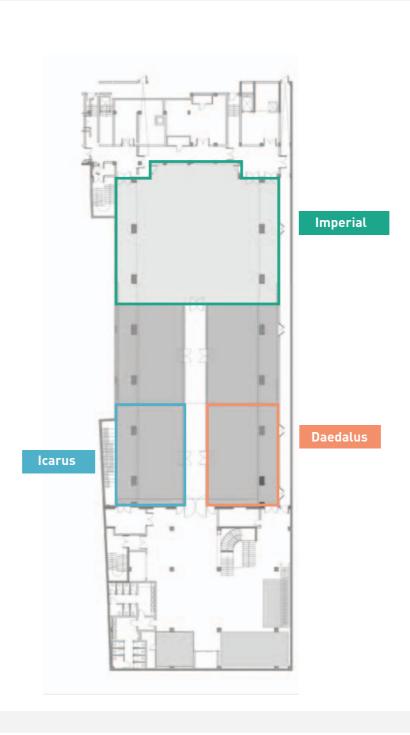
Venue: Corali Restaurant, MINOA Palace

The welcome reception will take place at the pool area of MINOA PALACE hotel. You will have the opportunity to taste greek wines, fingerfood and enjoy the majestic sunset view.

#### Conference Dinner (23rd May, 2014)

Venue: Manousakis Winery

All participants are invited to attend the gala Dinner which will take place at Manousakis Winery. A tour of the winery in combination with a presentation and explanation of the wine making process followed by a full tasting of all available wines is scheduled.





Wi fi access for delegates:

**Login:** conference **Password:** MINOA2014



# The programme at a glance

<b>(</b>	Thursday, 22 May 2014
09:15 09:45	Registration
09:45 10:30	Opening Remarks
	Welcome address Kostas Andriosopoulos (ESCP Europe Business School, UK) Spiros Papaefthimiou (Technical University of Crete, Greece) Constantin Zopounidis (Technical University of Crete, Greece)
10:30 12:30	Concurrent Sessions (A)
	1. Commodities and finance Room: Icarus Chair: K. Smimou (University of Ontario Institute of Technology (UOIT))
	2. GHG emissions: modeling, implications and markets Chair: Carmen Stefanescu (ESSET Business School)
12:30 12:45	Coffee Break 💆
12:45 13:30	Plenary Session A
	"Optimization and Economic Modeling of Energy Systems Centering CO2 Issues" Invited Speech by Prof. Panos M. Pardalos
13:30 14:30	Lunch
14:30 - 16:00	Concurrent Sessions (B)
	3. Oil and gas Room: Icarus Chair: Emilson Caputo Delfino Silva (University of Alberta)
	<b>4. Energy management and grids</b> Room: Daedalus Chair: Spiros Papaefthimiou ( <i>Technical University of Crete</i> )
16:00 - 16:30	Coffee Break 🖑
16:30 - 18:00	Concurrent Sessions (C)
	5. Oil and gas: Future scenarios Room: Icarus Chair: P. Navinda Kishan De Silva (International Energy Policy Institute, University College London)

**6. Electricity prices** Room: Daedalus Chair: Stephen John Poletti (University of Auckland)

18:00 - 19:00	Round Table Discussion Javier Suarez (Mediobanca) Konstantinos Ksifaras (DESFA) Kostas Andriosopoulos (ESCP Europe Business School, UK) Spiros Papaefthimiou (Technical University of Crete, Greece)
19:30 - 21:30	Welcome Reception Room: Corali Restaurant, MINOA Palace
(L)	Friday, 23 May, 2014
08:30 - 09:00	Registration
09:00 - 11:00	Concurrent Sessions (D)
	7. Commodities, finance & price volatility Room: Icarus Chair: Kyriaki Kosmidou (Aristotle University of Thessaloniki)
	8. Energy finance and economics I Room: Daedalus Chair: Milos Kopa (Charles University in Prague)
11:00 - 11:30	Coffee Break <u>□</u> <sup>7</sup>
11:30 - 12:15	Plenary Session B
	Invited Speech: Prof. Richard Tol Room: Imperial
12:15 - 14:00	Concurrent Sessions (E)
	<b>9. New energy technologies and renewables</b> Chair: Yiannis Katsigiannis ( <i>Technical University of Crete</i> )
	10. Energy finance and economics II Room: Daedalus Chair: Kenichi Matsumoto (The University of Shiga Prefecture)
14:00 - 15:00	Lunch
15:00 - 17:00	Concurrent Sessions (F)
	11. Electricity markets Chair: Nikolaos T. Milonas (National and Kapodistrian University of Athens)
	12. Energy markets regulation and policy Room: Daedalus Chair: Isabel Figuerola-Ferretti (Universidad Carlos III de Madrid)
17:00 - 17:15	Coffee Break 💆

υ—υ ### 17:15 - 18:00 Plenary Session C

> "The Emerging Price and Asset Performance Risk Room: Imperial in Power Markets"

Invited Speech: Prof. Derek Bunn

18:30 - 18:45 **Departure for Manousakis Winery** 

20:00 - 23:00 Dinner Manousakis Winery

Saturday, 24 May, 2014

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09:30 - 10:00 Registration

**Concurrent Sessions (G)** 10:00 - 12:00

> 13. Risk management Room: Icarus Chair: Rita D'Ecclesia (Sapienza University)

14. Commodities future and pricing Room: Daedalus Chair: Bihong Huang (University of Macau)

Coffee Break ♥ 12:00 - 12:30

12:30 - 13:15 Plenary Session D

> "Energy Policy Challenges for the 21st century: Room: Imperial Can they be modelled"

Invited Speech: Prof. Michael Jefferson

13:15 - 13:45 Closing Remarks

> Kostas Andriosopoulos (ESCP Europe Business School, UK) Rita D'Ecclesia (Sapienza University) Spiros Papaefthimiou (Technical University of Crete, Greece) Constantin Zopounidis (Technical University of Crete, Greece)

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1-day workshop: Commodities and Policy Implications

## **Detailed Programme**



# Thursday, 22 May 2014



## 09:15 09:45 Registration

## 09:45 10:30 Opening Remarks

#### Welcome address Room: Imperial

Kostas Andriosopoulos (ESCP Europe Business School, UK) Spiros Papaefthimiou (Technical University of Crete, Greece) Constantin Zopounidis (Technical University of Crete, Greece)

### 10:30 12:30 Concurrent Sessions (A)

#### 1. Commodities and finance Room: Icarus

Chair: K. Smimou (University of Ontario Institute of Technology (UOIT))

#### Behavior of wheat prices dynamics: An analysis using double exponential jump model

**Authors:** Xiaoying Huang **Presenter:** Xiaoying Huang

#### Price patterns resulting from different producer behavior in spatial equilibrium

Authors: Lars Mathiesen
Presenter: Lars Mathiesen

#### Application of GARCHcopula models in currency risk modelling

**Authors:** Aleš Kresta **Presenter:** Aleš Kresta

#### Performance-Based vesting conditions and early exercise in executive stock options

Authors: María BeldaRuiz, Susana Álvarez Díez, J. Samuel Baixauli Soler

Presenter: María BeldaRuiz

#### Time Varying Correlation: a key indicator in commodity and financial markets

Authors: Rita D'Ecclesia, Denis Kondi, Vera Jotanovic

Presenter: Rita D'Ecclesia

#### Examination of Galerkin Method within Valuation of Selected Options

Authors: Tomas Tichy, Marco Cassader

Presenter: Tomas Tichy

#### 2. GHG emissions: modeling, implications and markets

Chair: Carmen Stefanescu (ESSET Business School)

# Comparative Static Properties of a Noncooperative Acid Rain Control Model with Altruistic Preference: A Case Study on China and Japan

Room: Daedalus

Authors: Bihong Huang
Presenter: Bihong Huang

#### Forecasting of carbon emissions prices by ANFIS

Authors: Dimitrios Frantzis, George Atsalakis

Presenter: Dimitrios Frantzis

Sentiment in the EU Emissions Trading Scheme

Authors: Peter Deeney, Mark Cummins, Michael Dowling, Adam Bermingham

Presenter: Peter Deeney

The driving forces of a green and inclusive growth: Decomposition Analysis of carbon emissions and employment in EU27 countries before and during the economic crisis

Authors: Dimitra Kopidou, Danae Diakoulaki

Presenter: Dimitra Kopidou

Evaluating different emission pathways for fixed cumulative CO2 emissions

in the 21st century

Authors: Kenichi Matsumoto, Kaoru Tachiiri, Michio Kawamiya

Presenter: Kenichi Matsumoto

The Empirical Study on the Optimal Distribution Route of Minimum Carbon Footprint

of the Retail Industry Authors: Yan Li Presenter: Yan Li

12:30 12:45 Coffee Break 🖑

12:45 13:30 Plenary Session A

"Optimization and Economic Modeling of Energy Systems Room: Imperial Centering CO2 Issues"

Invited Speech by Prof. Panos M. Pardalos

invited Speech by Prof. Panos M. Pardalos

13:30 14:30 Lunch |

14:30 - 16:00 Concurrent Sessions (B)

3. Oil and gas Room: Icarus

Chair: Emilson Caputo Delfino Silva (University of Alberta)

Corporate Governments: Government Connections of Public Oil and Gas Companies

Authors: Theodore Kogan, Theodore Kogan

Presenter: Theodore Kogan

Using Equity, Index and Commodity Options to Obtain ForwardLooking Betas and ConditionalCAPM Expected CrudeOil Spot Prices

Authors: Paola Zerilli, Ehud Ronn

Presenter: Paola Zerilli

Asymmetry and Volatility in Oil Price Transmission

Authors: Stephan Silvestre, Johanna Etner, Yannick Le Pen

Presenter: Stephan Silvestre

Economic impact analysis of unconventional natural gas development and policy

implications

Authors: P. Navinda Kishan De Silva, Stefaan Simons, Paul Stevens

Presenter: P. Navinda Kishan De Silva

4. Energy management and grids Room: Daedalus

**Chair:** Spiros Papaefthimiou (*Technical University of Crete*)

Long term energy and environmental planning models driven by perceived value of energy services: mixing techno economic models with behavioral approaches

Authors: Emmanuel Fragniere, Metin Caliskan, Roman Kanala, Francesco Moresino,

Ion Smeureanu

Presenter: Emmanuel Fragniere

#### Power System Economics: Sensitivity to Wind Power Inter Annual Variability

Authors: Alicja Lojowska, Georgios Papaefthymiou

Presenter: Alicja Lojowska

# A tool for evaluating optimal configuration of hybrid power systems including renewable energy technologies

Authors: Spiros Papaefthimiou, Yiannis Katsigiannis, Fotis Kanellos

Presenter: Yiannis Katsigiannis

# Alternative low carbon electricity pathways under a European nuclear phase out Achievement of climate goals

Authors: Rajesh Mathew Pattupara, Kannan Ramachandran, Hal Turton

Presenter: Rajesh Mathew Pattupara

## 16:00 - 16:30 Coffee Break <u>□</u>/

#### 16:30 - 18:00 Concurrent Sessions (C)

#### 5. Oil and gas: Future scenarios Room: Icarus

**Chair:** P. Navinda Kishan De Silva (International Energy Policy Institute, University College London)

#### Diversifying away the War Risk

**Authors:** Ayman "Mohammad Amin" Omar, Tomasz Piotr Wisniewski, Sandra Nolte **Presenter:** Ayman "Mohammad Amin" Omar

# A Stochastic Volatility Model for Crude Oil Futures Curves and the Pricing of Calendar Spread Options

Authors: Lorenz Lucas Schneider Presenter: Lorenz Lucas Schneider

#### Driven by Fear? The Tail Risk Premium in the Crude Oil Futures Market

**Authors:** Reinhard Ellwanger **Presenter:** Reinhard Ellwanger

#### Canada's Oil Sands Innovation Alliance: A WinWin Strategy for Canada?

**Authors:** Emilson Caputo Delfino Silva **Presenter:** Emilson Caputo Delfino Silva

### 6. Electricity prices Room: Daedalus

Chair: Stephen John Poletti (University of Auckland)

#### Credit Impairment for European Power Companies under Decarbonisation

Authors: Celine M. McInerney, Derek Bunn

Presenter: Celine M. McInerney

#### Models for electricity price dynamics

Authors: Giuseppe Carcasi, Rita D'Ecclesia

Presenter: Giuseppe Carcasi

#### Convenience yields in electricity prices: Evidence from the natural gas and coal markets

Authors: Nikolaos T. Milonas, Nikolaos Paratsiokas

Presenter: Nikolaos T. Milonas

#### The sharing of risks in energy from waste PPS: An Italian case study

Authors: Laura D'Alessandro, Stephen J. Bailey, Marco Giorgino

Presenter: Laura D'Alessandro

#### 18:00 - 19:00

#### Round Table Discussion

Javier Suarez (Mediobanca) Konstantinos Ksifaras (DESEA) Kostas Andriosopoulos (ESCP Europe Business School, UK) Spiros Papaefthimiou (Technical University of Crete, Greece)

19:30 - 21:30

Welcome Reception Room: Corali Restaurant, MINOA Palace



# Friday, 23 May, 2014



08:30 - 09:00

### Registration

09:00 - 11:00

## Concurrent Sessions (D)

## 7. Commodities, finance & price volatility Room: Icarus

Chair: Kyriaki Kosmidou (Aristotle University of Thessaloniki)

#### Valuation of Commodity Derivatives with an Unobservable Convenience Yield

Authors: Constantin Mellios, Anh Ngoc Lai

Presenter: Constantin Mellios

#### A Reliability Evaluation Method for Data of Component Life

Authors: Xi Gong Presenter: Xi Gong

#### A Joint Model of Price and Inventory on a Market with a Market Maker

Authors: Milos Kopa, Martin Šmíd

Presenter: Milos Kopa

#### The attractiveness of project finance: empirical evidence from Italy

Authors: Laura D'Alessandro, Stephen J. Bailey, Marco Giorgino

Presenter: Laura D'Alessandro

#### CrossMarket Spillovers with 'Volatility Surprise'

Authors: Julien Chevallier. Sofiane Aboura

Presenter: Julien Chevallier

#### The Dynamics of Trading in Commodity Futures

Authors: Carmen Stefanescu, Aditya Kaul, Lorenzo Naranjo

Presenter: Carmen Stefanescu

#### 8. Energy finance and economics I Room: Daedalus

Chair: Milos Kopa (Charles University in Prague)

#### Managing energy supply risk using portfolios of wind and solar power plants

Authors: Nikolaos Thomaidis, Francisco Javier Santos Alamillos, David Pozo Vázquez,

Julio Usaola García

Presenter: Nikolaos Thomaidis

#### Data Envelopment Analysis in finance and energy new approaches to efficiency and their numerical tractability

Authors: Martin Branda Presenter: Martin Branda

#### Evaluation of crosscountry wind energy investments: A portfoliobased approach

Authors: Dimitrios Angelopoulos, Konstantinos Milios, John Psarras

**Presenter:** Dimitrios Angelopoulos

#### PriceInduced Instability of Feedin Tariff Systems: A Real Options Approach

Authors: Georg Siegert Presenter: Georg Siegert

The Economic and Environmental Performance of Power Plants: Benchmarking Fuel

Efficiency While Accounting for Differences in Productivity

Authors: Wagner A. Kamakura, Toby Li Presenter: Wagner A. Kamakura

#### Implied volatility estimation violations of arbitrage free conditions

Authors: Tomas Tichy, Milos Kopa, Sebastiano Vitali

Presenter: Milos Kopa

#### Coffee Break ♥ 11:00 - 11:30

#### 11:30 - 12:15 Plenary Session B

Invited Speech: Prof. Richard Tol Room: Imperial

#### 12:15 - 14:00 Concurrent Sessions (E)

#### 9. New energy technologies and renewables Room: Icarus

Chair: Yiannis Katsigiannis (Technical University of Crete)

#### Short life-cycle materials: Multicriteria assessment in the context of Sustainable development and Energy efficiency.

Authors: Carlos Enrique Escobar Toledo, José Luis Tejera Oliver, Bertrand Mareschal

Presenter: Carlos Enrique Escobar Toledo

#### Solar water heaters with advanced storage capabilities

Authors: Spiros Papaefthimiou, Manolis Souliotis

Presenter: Manolis Souliotis

#### Full-color semitransparent thin-film solar modules

Authors: Chia-Hsun Hsu, Pin Han, Shui-Yang Lien

Presenter: Chia-Hsun Hsu

#### Nature Inspired Techniques and Meta-heuristics in Energy Dispatch Problems: A comparison

Authors: Nikolaos Thomaidis, Alexandros Tzanetos, Giorgos Dounias

Presenter: Alexandros Tzanetos

#### Hourly seasonal ARMA-GARCH approach for short term forecasting

Authors: Faddy Ardian, Anna Creti, Francesco Vallone

Presenter: Faddy Ardian

#### 10. Energy finance and economics II Room: Daedalus

Chair: Kenichi Matsumoto (The University of Shiga Prefecture)

#### Measuring the efficiency of energyintensive industries across 23 EU countries

Authors: Georgia Makridou, Kostas Andriosopoulos, Michael Doumpos,

Constantin Zopounidis Presenter: Georgia Makridou

#### Do OPEC announcements influence oil prices?

Authors: Kostas Andriosopoulos, Constantin Mellios, Amine Loutia

Presenter: Amine Loutia

#### Risk Evaluation of Wind Turbine Investments

Authors: Petros Katsoulis, Nikolaos Thomaidis, Jan Jantzen

Presenter: Petros Katsoulis

#### Forecasting costs and capacity for PV energy

Authors: Ignacio Mauleón Presenter: Ignacio Mauleón

#### Energy Market, Stock Prices, Volatility and Risk Management

Authors: Karen Wong Presenter: Karen Wong

#### 14:00 - 15:00

## Lunch |

#### 15:00 - 17:00

## **Concurrent Sessions (F)**

#### 11. Electricity markets Room: Icarus

**Chair:** Nikolaos T. Milonas (National and Kapodistrian University of Athens)

# The ACEWEM Computational Laboratory: An AgentBased Modelling Framework For The UK Wholesale Electricity Market

OK Wholesale Electricity Market

Authors: Kostas Andriosopoulos, Daniil Kiose, Vlasios Voudouris

Presenter: Daniil Kiose

#### Convenience yields in the European electricity market

Authors: Nikolaos T. Milonas, Fotis Kalantzis, Stavros Thomadakis

Presenter: Fotis Kalantzis

#### The challenges of Market Coupling in Latin America and Europe

Authors: Camila Ochoa, Ann van Ackere

Presenter: Camila Ochoa

# Energy Only electricity markets: Do they work and are they efficient with large amounts of wind and market power?

Authors: Stephen John Poletti Presenter: Stephen John Poletti

# Price and Volatility Interrelationships in the Wholesale Spot Electricity Markets of the Central Western European and the Nordic Region: A Multivariate GARCH Approach

Authors: Kyriaki Kosmidou, Michail Sotiriadis, Radamanthis Tsotsos

Presenter: Radamanthis Tsotsos

#### 12. Energy markets regulation and policy Room: Daedalus

Chair: Isabel Figuerola-Ferretti (Universidad Carlos III de Madrid)

#### Energy's exports forecasting by a neurofuzzy controller

Authors: Dimitrios Frantzis, George Atsalakis

Presenter: Dimitrios Frantzis

#### From fuel taxation to efficiency standards: A wrong turn in European climate protection?

Authors: Manuel Frondel Presenter: Manuel Frondel

#### Development of Sustainable Waste to Energy Project in Udonthani, Thailand

**Authors:** Somrat Kerdsuwan **Presenter:** Somrat Kerdsuwan

#### The Dynamics of Energy Futures and EquitySector Returns:

Evidence from the USA and Canada

Authors: K. Smimou Presenter: K. Smimou

#### The biofuel connection: oil and food prices after the ethanol quantitative mandate

Authors: Fernando Hugo Avalos, Marco Lombardi

Presenter: Fernando Hugo Avalos

## 17:00 - 17:15 Coffee Break 💆

## 17:15 - 18:00 Plenary Session C

"The Emerging Price and Asset Performance Risk Room: Imperial in Power Markets"

Invited Speech: Prof. Derek Bunn

## 18:30 - 18:45 Departure for Manousakis Winery

20:00 - 23:00 Dinner Manousakis Winery



# Saturday, 24 May, 2014



## 09:30 - 10:00 Registration

## 10:00 - 12:00 Concurrent Sessions (G)

## 13. Risk management Room: Icarus

Chair: Rita D'Ecclesia (Sapienza University)

#### RISK Illustration & Mitigation of INNOVATION

Authors: Stefan Petters
Presenter: Stefan Petters

#### Pension Plan Problem Authors: Sebastiano Vitali Presenter: Sebastiano Vitali

#### Are Sustainable Banks any different?

Authors: Thomas Syrmos, Angelos Antzoulatos, Chris Tsoumas

Presenter: Thomas Syrmos

#### Predictability of the Realised Hedge Ratio

Authors: Chryssa Markopoulou, Vasiliki Skintzi, Apostolos Refenes

Presenter: Chryssa Markopoulou

# Constrained Optimization Parameters for the Computation of Investable Portfolios under CrisisDriven Market Outlooks: A Regulatory EconomicCapital Structural Approach

Authors: Mazin A. M. Al Janabi Presenter: Mazin A. M. Al Janabi Probability and Pertinence

Authors: Alain R. Ruttiens, Adela Baho

Presenter: Alain R. Ruttiens

A multi-criteria assessment of the environmental performance of European ports

Authors: Alexandra Maragkogianni, Spiros Papaefthimiou, Michael Doumpos,

Kostas Andriosopoulos

Presenter: Alexandra Maragkogianni

14. Commodities future and pricing Room: Daedalus

**Chair:** Bihong Huang (University of Macau)

Testing for Mild Explosivity and Bubbles in LME NonFerrous Metals Prices

Authors: Isabel FiguerolaFerretti, Rod McCrorie, Chris L. Gilbert

Presenter: Isabel FiguerolaFerretti

Speculation in the Precious Metals Futures Markets: Evidence from DCOT Data

Authors: David Bosch, Elina Pradkhan

Presenter: David Bosch

Salmon price volatility: a weightclassspecific multivariate approach

Authors: Daumantas Bloznelis Presenter: Daumantas Bloznelis

Pairs Strategies and Hedging Properties of Gold and Silver Markets

Authors: Ioannis Paraskevopoulos, Isabel Figuerola Ferretti, jesus Gonzalo

Presenter: Ioannis Paraskevopoulos

Agrotourism industry development through Internet technologies:

A Multicriteria approach

Authors: Constantin Zopounidis, Christos Lemonakis, Zacharoula Andreopoulou,

Christiana Koliouska

Presenter: Christos Lemonakis

A multicriteria model for assessing the financial performance of Greek

manufacturing firms

Authors: Constantin Zopounidis, Christos Lemonakis, Zacharias Voulgaris

Presenter: Christos Lemonakis

Conditional Least Squares and Copulae in Claims Reserving for a Single Line of Business

Authors: Michal Pesta, Ostap Okhrin

Presenter: Michal Pesta

Coffee Break 🖑 12:00 - 12:30

12:30 - 13:15 Plenary Session D

"Energy Policy Challenges for the 21st century: Room: Imperial

Can they be modelled" Invited Speech: Prof. Michael Jefferson

13:15 - 13:45 Closing Remarks

> Kostas Andriosopoulos (ESCP Europe Business School, UK) Rita D'Ecclesia (Sapienza University)

Spiros Papaefthimiou (Technical University of Crete, Greece) Constantin Zopounidis (Technical University of Crete, Greece

# **Conference Participants**

#### NAME COMPANY / ORGANISATION

Ahmed Adamu Newcastle University

Mazin A. M. Al Janabi
UAE University, College of Business & Economics
Francis Amponsah
Council for Scientific and Energy Research

Kostas Andriosopoulos RCEM

Dimitrios Angelopoulos National Technical University of Athens

Faddy Ardian Ecole Polytechnique

Fernando Hugo Avalos Bank for International Settlements

Argyro Avgoustaki ESCP Business School
Evans Bediako Rand Hills College
María Belda-Ruiz University of Murcia (Spain)

Joachim Bertsch University of Cologne

Daumantas Bloznelis Norwegian University of Life Sciences

David Bosch Humboldt-University
Martin Branda Charles University in Prague

Svetlana Brants Ashot

Derek Bunn London Business School Giuseppe Carcasi Rete Ferroviaria Italiana S.p.A

Julien Chevallier IPAG Business School
Laura D'Alessandro Politecnico Di Milano

P. Navinda Kishan De Silva International Energy Policy Institute, University College London

Rita D'Ecclesia Sapienza University
Peter Deeney Dublin City University
Michael Doumpos Technical University of Crete

Reinhard Ellwanger European University Institute, Florence

Fathi Elosta waha oil company

Carlos Enrique Escobar Toledo Faculty of Chemistry, UNAM and School of Mines and Energy, UPM

Isabel Figuerola-Ferretti Universidad Carlos III de Madrid

Emmanue Fragniere University of Applied Sciences Western Switzerland

Dimitrios Frantzis Student Researcher

Manuel Frondel RWI

Xi Gong Beijing University of Aeronautics & Astronautics

Patrick Gougeon ESCP Europe

Chia-Hsun Hsu National Chung Hsing University, Taiwan

Xiaoying Huang University of Paris 1 Panthéon-Sorbonne & Labex-Réfi

Bihong Huang

Anthony Sese Iyinbor

Michael Jefferson

Wichael Jefferson

University of Macau

Rokozi Investment Ltd

ESCP Europe Business School

Aakash Jhaveri IIT Bombay Xin Jin Lecturer

Fotios Kalantzis

Wagner A. Kamakura

Roman Kanala

Fotis Kanellos

Yiannis Katsigiannis

University of Athens

Rice University

University of Geneva

Technical University of Crete

Petros Katsoulis Department of Financial & Management Engineering
Somrat Kerdsuwan King Mongkut's University of Technology North Bangkok

Daniil Kiose ESCP Europe
Theodore Kogan Leiden University

Marcel Rene Kohler University of KwaZulu-Natal

Anastasis Kokkinos Esanda

Ksifaras Konstantinos CEO of DESFA S.A.

Milos Kopa Charles University in Prague

Dimitra Kopidou National Technical University of Athens
Kyriaki Kosmidou Aristotle University of Thessaloniki
Aleš Kresta VSB - Technical University of OStrava

Christos Lemonakis Technological Educational Institute of Crete, Agios Nikolaos Branch

Yan Li Renmin University of China

Shui-Yang Lien Department of Materials Science and Engineering, DaYeh University

Alicja Lojowska Delft University of Technology

Amine Loutia University Paris 1 Panthéon-Sorbonne
Digvijay Madamae Rotterdam School of Management

Georgia Makridou RCEM

Alexandra Maragkogianni Technical University of Crete

Chryssa Markopoulou Athens University of Economics and Business

Lars Mathiesen Norwegian School of Economics
Kenichi Matsumoto The University of Shiga Prefecture
Ignacio Mauleón Universidad Rey Juan Carlos
Celine M. McInerney University College Cork

Constantin Mellios University Paris 1 Panthéon-Sorbonne

Nikolaos T. Milonas National and Kapodistrian University of Athens

Abdul Karim Mohammed Mbowa Business College
Camila Ochoa University of Lausanne
Ayman "Mohammad Amin" Omar
Spiros Papaefthimiou University of Crete

Ioannis Paraskevopoulos BANKIA

Panos Pardalos University of Florida
Rajesh Mathew Pattupara Paul Scherrer Institute

Tchifo Ngimpa Paul Chander Hps International Consulting Plc

Michal Pesta Charles University in Prague

Stefan Petters GUO - Business Development Consult

Stephen John Poletti University of Auckland
Giovanna Radaelli Universita' Insubria
Alain R. Ruttiens ESCP Europe, Paris
Lorenz Lucas Schneider EMLYON Business School

Georg Siegert HHL Leipzig Graduate School of Management

Julian I. Silk UMUC

Emilson Caputo Delfino Silva University of Alberta
Stephan Silvestre ESG Management School

Martin Šmíd Institute of Information Theory and Automation of the ASCR

K. Smimou University of Ontario Institute of Technology (UOIT)

Carmen Stefanescu ESSEC Business School
Thomas Syrmos University of Piraeus

Stavros Thomadakis National and Kapodistrian University of Athens
Nikolaos Thomaidis Department of Financial & Management Engineering

Tomas Tichy VSB-TU0

Richard Tol University of Sussex

Radamanthis Tsotsos Aristotle University of Thessaloniki

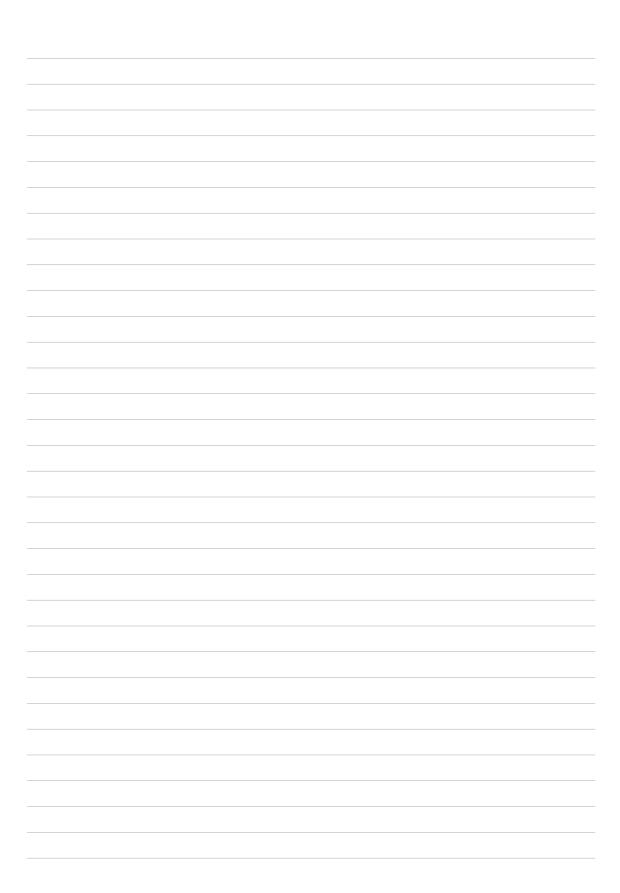
Alexandros Tzanetos Financial and Management Engineering, University of the Aegean

Sebastiano Vitali University of Bergamo

Vlasios Voudouris ESCP Europe
Karen Wong Assistant Professor
Paola Zerilli University of York

Constantin Zopounidis Technical University of Crete & Audencia Group

Notes	
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EURO Working Group for Commodities and Financial Modelling



# 53rd Meeting of the EWGCFM

and 2nd International Conference of the RCEM

May 22-24 2014 Chania, Greece

**1-day workshop:**Commodities
and Policy Implications





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