# 2<sup>nd</sup> INTERNATIONAL CONFERENCE





# THE LANDSCAPE IN THE NEW ERA of ENERGY TRANSITION:

Challenges, investment opportunities and technological innovations

# PROGRAMME





# HELLENIC ASSOCIATION for ENERGY ECONOMICS



The Hellenic Association for Energy Economics (HAEE) is the Greek affiliate of the International Association for Energy Economics (IAEE). HAEE is a non-profit research and professional organization acting as an interdisciplinary forum for the exchange of ideas and experiences among energy experts.

HAEE was founded in 2015 in Greece, and has a global orientation welcoming the participation of researchers and practitioners from around the world interested in energy and economic related fields.

It acts as an independent consulting body for national and international organizations to whom it provides a broad contribution on issues related to energy, economics, policymaking and theory. Through meetings and joint initiatives HAEE also provides a means of professional communication and exchange within its members and the authorities defining the Greek energy policy.

HAEE organizes meetings amongst experts and specialists interested in energy, economics and environment - organizes conferences and seminars on both national and international levels - promotes training initiatives in the energy and economic sector - provides research, studies and other services for its members.



### **CONFERENCES**

International, regional and national conferences where participants present their latest research, hear about energy industry developments from internationally renowned experts speaking from different perspectives, and network with other energy professionals.

### **PUBLICATIONS**

Peer-reviewed journals and electronic media presenting high quality, leading edge research and ideas on energy and related issues.

### **EDUCATION**

Programs and Summer Schools to assist the education of students and young professionals and help them become the next generation of energy professionals.

### **About IAEE**

The International Association for Energy Economics is an independent, non-profit, organization for business, government, academic and other professionals applying economics in concert with other disciplines to enhance understanding of all aspects of energy production and use. The Association is global in scope and membership, and covers the full range of energy industry participants—including businesses, academia, scientific and other research institutions, consultants, governments, and intergovernmental institutions. The IAEE was founded in 1977 to provide an interdisciplinary forum for the exchange of ideas about the energy industry.

### **Online Membership Directory**

As a member of IAEE, we publish contact information (mailing address, email, phone, energy specializations, etc.) in the Online Membership Directory as well as in the membership directory pdf file. The ability to completely search this directory of IAEE members worldwide is available in the members only section of our website and is an invaluable resource for research and networking.

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# CONFERENCE PROGRAMME

## **Thursday - May 18, 2017**

# 08:30 - 09:30 Coffee and Registration09:30 - 10:15 Opening and Welcome Address

**Kostas Andriosopoulos,** President, HAEE; Director, Research Centre for Energy Management, ESCP Europe

**Ricardo Raineri Bernain**, IAEE President Elect 2016 (frm Minister of Energy, Chile) **Giorgos Stathakis\***, Minister of Environment and Energy, Greece

10:15 - 10:30 Keynote Address

Giannis Maniatis, MP; frm Minister of Environment and Energy, Greece

10:30 - 10:45 Keynote Address

Kostas Skrekas, MP; Shadow Minister for Energy, Greece

10:45 - 10:55 Keynote Address

**Geoffrey R. Pyatt,** Ambassador of the United States of America to the Hellenic Republic

10:55 - 11:40 Plenary Session

**TITLE: Winter Energy Package and Insularity** 

- DG energy's winter package and its key implications
- Insularity in Europe and the latest developments from the European Commission

Session Chair: Thodoris Karipidis. CEO. Lever

**Kevnote Address:** 

**Samuele Furfari,** Adviser to the General Director of DG Energy, European Commission; Professor, Free University of Brussels

**George Kremlis,** Head, Cohesion Policy and Environmental Impact Assessments Unit, DG Environment - European Commission

Nektaria Karakatsani, Member of the Board, Regulatory Authority for Energy

11:40 - 12:00 Plenary Session

**TITLE: Energy Security Challenges in East Med** 

**Session Chair: Kostas Andriosopoulos,** President, HAEE; Director, Research Centre for Energy Management, ESCP Europe

Keynote Address: Thodoris Kitsakos, CEO, DEPA S.A.

12:00 - 13:15 Plenary Session

TITLE: The landscape in the new era of energy transition:
Challenges, investment opportunities and technological innovations

- How can countries prepare for the new era of global energy transition?
- Challenges, investment opportunities and technological innovations in the energy sector
- Will alternative fuels (such as CNG, LNG, hydrogen, etc.) help swift from the traditional hydrocarbon fuels in the transportation sector?

**Session Chair: Patrick Gougeon,** Professor of Energy Economics, ESCP Europe Business School

- 1. Yannis Kabouris, CEO, ADMIE
- 2. Loukas Lazarakis, Managing Director, EDF Nuvelles, Greece
- Alkis Drakinos, Head of Resident Office Greece, European Bank for Reconstruction and Development (EBRD)
- **4. Antoine Halff,** Director, Global Oil Markets, Center on Global Energy Policy, Columbia University
- 5. Gavin Kretzschmar, Professor of Finance and Management Control, EADA
- 6. Miguel Gaspar Silva, Industry Director, EMEA, SAP

### 13:15 - 14:15 Light Lunch

### 14:15 - 15:45 Concurrent Sessions (1-3)

### Room: Aegean Ballroom

### 1. New perspectives for the energy sector

Chair: Kyriaki Kosmidou (Aristotle University of Thessaloniki)

# Alternative risk measurements in the power sector applying Monte Carlo simulation on PPC

**Authors:** Angeliki Zacharaki (Aristotle University of Thessaloniki), Radamanthis Tsotsos (Aristotle University of Thessaloniki), Kyriaki Kosmidou (Aristotle University of Thessaloniki)

Presenters: Angeliki Zacharaki (Aristotle University of Thessaloniki)

# Economic analysis of a vertically integrated electricity company: Case study of regulatory market share reduction in the Greek wholesale electricity market during the period 2017 - 2019

**Authors:** Iraklis Skoteinos (University of Piraeus), Assimina Vlachou (University of Piraeus), Athanasios Dagoumas (University of Piraeus)

Presenters: Assimina Vlachou (University of Piraeus)

# A novel approach to improve the estimation of customer baseline loads in residential demand response programs

Authors: Peter Schwarz (UNC Charlotte), Saeed Mohajeryami (UNC Charlotte)

**Presenters:** Peter Schwarz (UNC Charlotte)

# Dynamic orthogonal components in day ahead electricity prices: The case of the PJM wholesale market

**Authors:** Nikolaos Thomaidis (Aristotle University of Thessaloniki), Gordon Dash (University of Rhode Island), Nina Kajiji (University of Rhode Island, NKD Group Inc)

**Presenters:** Nikolaos Thomaidis (Aristotle University of Thessaloniki)

# Optimal participation of renewable energy and demand response resources in the wholesale electricity market in Greece

**Authors:** Ilias Marneris (Aristotle University of Thessaloniki), Dimitris Chatzigiannis (Aristotle University of Thessaloniki), Pandelis Biskas (Aristotle University of Thessaloniki)

Presenters: Pandelis Biskas (Aristotle University of Thessaloniki)

### Assessment of the PPC S.A. financial state based on multiple ratios analysis

**Authors:** Angeliki Zacharaki (Aristotle University of Thessaloniki), Radamanthis Tsotsos (Aristotle University of Thessaloniki), Kyriaki Kosmidou (Aristotle University of Thessaloniki)

Presenters: Kyriaki Kosmidou (Aristotle University of Thessaloniki)

Room: **Delos** 

# 2. Potential market developments and future infrastructures for the oil industry

**Chair:** Mamdouh Salameh (International Oil Economist, Oil Market Consultancy Service)

### A shocking truth about oil shocks and stock returns

Authors: George Filis (Bournemouth University), David Broadstock (The Hong Kong

Polytechnic University)

**Presenters:** George Filis (Bournemouth University)

# The impact of alternative energy on OPEC and non-OPEC oil production: A simultaneous equation approach

Authors: Sarah Najm (University of Reading)
Presenters: Sarah Najm (University of Reading)
Oil prices and the renewable energy sector

Authors: Evangelos Kyritsis (Norwegian School of Economics), Apostolos Serletis

(University of Calgary)

Presenters: Evangelos Kyritsis (Norwegian School of Economics)

### The oil price-stock market nexus: Evidence from the GCC countries

Authors: Leila Dagher (American University of Beirut), Fatima Karout (American

University of Beirut)

**Presenters:** Leila Dagher (American University of Beirut)

### A post-oil era is a myth

**Authors:** Mamdouh Salameh (International Oil Economist, Oil Market Consultancy) **Presenters:** Mamdouh Salameh (International Oil Economist, Oil Market Consultancy)

### Room: Syros

# 3. Potential market developments and future infrastructures for the gas industry

Chair: Seyed Mohsen Razavi (Gas Exporting Countries forum)

### Shale gas production and U.S. natural gas market dynamics: a TVP-VAR approach

Authors: Christophe Schalck (Paris School of Business), Stephan Silvestre (Paris

School of Business)

Presenters: Christophe Schalck (Paris School of Business)

### Experience curve for natural gas production by hydraulic fracturing

**Authors:** Carl Greenfield (International Technology and Trade Associates, Inc. (ITTA)), Rokuhei Fukui (World Bank Group/Johns Hopkins School of Advanced International Studies)

**Presenters:** Carl Greenfield (International Technology and Trade Associates, Inc. (ITTA)), Rokuhei Fukui (World Bank Group/Johns Hopkins School of Advanced International Studies)

# Prospects of liquefied gas in Bangladesh economy as a move towards fuel diversification

Authors: Muntasir Murshed (North South University),

Sakib Bin Amin (North South University)

Presenters: Sakib Bin Amin (North South University)

### Future LNG demand and implications for the shipping industry

**Authors:** Konstantinos Kanellopoulos (Cass Business School) **Presenters:** Konstantinos Kanellopoulos (Cass Business School)

### The role of natural gas in OECD Europe energy balance for the period till 2040

**Authors:** Dmitry Sokolov (Gas Exporting Countries Forum (GECF)), Sofiane Ghezali (Gas Exporting Countries Forum (GECF)), Seyed Mohsen Razavi (Gas Exporting Countries Forum (GECF))

Presenters: Seyed Mohsen Razavi (Gas Exporting Countries Forum (GECF))

### 15:45 - 17:15 Plenary Session

### TITLE: Oil & Gas Exploration and Development in East Med

- Are the East-med E&P projects bankable?
- Is there sufficient cooperation among all involved member states?
- What is the US energy policy for the region?
- What are the prospects in the region following the involvement of Greek interests in Israel's E&P sector?
- How are the economic risks being managed in the Greek endeavours?

**Keynote Address: Sherif Sousa,** Secretary General, Ministry of Energy, Egypt **Session Chair: Thodoris Tsakiris,** Assistant Professor, University of Nicosia

- 1. Yannis Bassias, Chairman & CEO, Hellenic Hydrocarbon Resources Management
- 2. Mischenko Vyacheslav, CEO Russia & FSU, Argus Media
- **3. Yannis Grigoriou,** General Manager, Exploration & Production of Hydrocarbons, Hellenic Petroleum S.A.
- 4. Mamdouh Salameh, International Oil Economist, Oil Market Consultancy Service
- 5. Aris Stefatos, Chief Operations Officer, MVest Energy AS

### 17:15 - 19:00

### **Plenary Session**

### TITLE: Gas outlook in Europe: A focus on the South East border

- Effective gas supply to Greek islands and off-grid areas.
- Is a gas hub in Greece realistic and what are the benefits of having one?
- Can we improve Greece's gas mix to make it cheaper?
- An update on the status of all major gas projects in or passing-through Greece (TAP, IGB, Alexandroupolis FSRU etc.)

Session Chair: Kostas Xifaras, Head of Energy, Technical Chamber of Greece

- 1. Mariana Ortiz Laborde, Portfolio Director, Global Gas, Gas Natural Fenosa
- 2. Valérie Ducrot, Executive Director, Global Gas Centre
- 3. Thomas Achimastos, Vice-President, GasTrade
- 4. Panayotis Kanellopoulos, CEO, M&M Gas
- 5. Vittorio Musazzi. Head Of Relations With International Partners. SNAM

### 19:00

### Reception

Keynote Address: Kostis Hatzidakis\*, Vice-President, New Democracy

## Friday - May 19, 2017

### 08:00 - 09:00

### **Coffee and Registration**

### 09:00 - 10.00

### **Opening of 2nd Day & Award Ceremony**

### **Keynote Address:**

**Makis Papageorgiou,** Business Consultant, frm Deputy Minister of Energy, Greece **Pantelis Kapros,** Professor, National Technical University of Athens

### 10:00 - 11:30

### **Plenary Session**

### TITLE: What should the optimal energy mix be to address the trilemma issue?

- How should you plan a country's energy security for a minimal cost and in an environmentally friendly way?
- Natural gas as a bridge to a renewable energy future
- How much of central planning and how much of free markets is needed?

Session Chair: Tasos Garis, Energy consultant; Head of Energy Strategy and Planning, HAEE

- 1. Manolis Panagiotakis, Chairman & CEO, PPC S.A.
- 2. George Spanoudis, Chairman, DEPA
- 3. Dinos Benroubi, CEO, PROTERGIA S.A.
- 4. Reinhard Haas, Current coordinator of European affiliates of the IAEE
- **5. Hans Coenen,** Vice-President Corporate Business Development, N.V. Nederlandse Gasunie
- 6. Sakis Kallitsantzis, Vice-Chairman, Hellenic Federation of Enterprises (SEV)

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

**Keynote Address: Sokratis Famellos,** Alternate Minister of Energy and Environment, Greece

Keynote Address: Soteris Kalogirou, Editor-in-Chief, Renewable Energy Journal

TITLE: Renewable Energy Systems: Current Status, Prospects and Hot Research Areas

### **12:30 - 14:00** Plenary Session

TITLE: Integration of RES in the energy markets

- Implications to the market design and operation
- The progress of renewables in terms of cost. Subsidies... or not?
- Dealing with the legacy of RES arrears
- How RES can be a key driver of growth for Greek companies beyond the borders of their domestic markets
- Chasing a targeted and sustainable national strategy for the optimal use of the European funds and other financial instruments in green actions

Keynote Address: Michalis Philippou, CEO & Chairman, LAGIE

Session Chair: Miltos Aslanoglou, Energy Consultant

- 1. Carlo Andrea Bollino, President, A.I.E.E. (Italian Association for Energy Economics)
- 2. Arthouros Zervos, Chairman of REN21 (the Renewable Energy Policy Network for the 21st Century); Professor, National Technical University of Athens
- 3. Gaetano Massara, CEO Southern Eastern Europe, General Electric
- 4. Eirinaios M. Pelechras, Sales and Business Development of EMEK Group
- 5. Ioannis Orfanos, Managing Director, Green Value Associates

### 14:00 - 15:00 Light Lunch

### 15:00 - 16:30 Concurrent Sessions (4-6)

### Room: Aegean Ballroom

### 4. Decentralized energy production and grid management

Chair: Georgios Papaefthymiou (Elia Grid International GmbH)

# Decentralized management of flexible loads in future power systems: Going beyond dynamic pricing

Authors: Dimitrios Papadaskalopoulos (Imperial College London),

Goran Strbac (Imperial College London)

**Presenters:** Dimitrios Papadaskalopoulos (Imperial College London)

### Electricity grid tariffs to increase the flexibility of power-to-heat in district heating

Authors: Claire Bergaentzlé (DTU), Klaus Skytte (DTU), Ole Jess Olsen (DTU),

Emilie Rosenlund Soysal (DTU), Jonas Katz (DTU)

Presenters: Claire Bergaentzlé (DTU)

# The potential of sector coupling and demand side management in a highly renewable German power system

**Authors:** Alexander Kies (Frankfurt institute for Advanced Studies) **Presenters:** Alexander Kies (Frankfurt institute for Advanced Studies)

# Smart regulatory framework conditions for smart energy systems? Incentives for flexible district heating in the Nordic countries

Authors: Klaus Skytte (DTU Management Engineering), Ole Jess Olsen (DTU Management Engineering), Emilie Rosenlund Soysal (DTU Management Engineering),

Eli Sandberg (NMBU Ecology and Natural Resource Management),

Daniel Møller Sneum (DTU Management Engineering)

**Presenters:** Daniel Møller Sneum (DTU Management Engineering)

### Carbon offsetting and guarantees of origin (GOs) from renewable energy sources: Contribution to a greener future of industry

Authors: Konstantinos Gkarakis (RES Lab, Department of Energy Technology

Engineering, TEI Athens)

Presenters: Konstantinos Gkarakis (RES Lab, Department of Energy Technology

Engineering, TEI Athens)

# Power system flexibility tracker: Indicators to track flexibility progress towards high-RES systems

Authors: Edwin Haesen (Ecofys), Georgios Papaefthymiou (Elia Grid

International GmbH), Thobias Sach (Ecofys)

**Presenters:** Georgios Papaefthymiou (Elia Grid International GmbH)

### Room: **Delos**

### 5. New perspectives in Oil & Gas

Chair: Stephan Silvestre (Paris School of Business)

### Nord stream 2 - Legal and political objections of the EU

**Authors:** Jörg Himmelreich (University of Potsdam, Germany) **Presenters:** Jörg Himmelreich (University of Potsdam, Germany)

# A tale of two corridors: The importance of the Caspian Sea and the Eastern Med for the EU's gas security policy

**Authors:** Theodoros Tsakiris (University of Nicosia) **Presenters:** Theodoros Tsakiris (University of Nicosia)

### Informed trading in oil futures market

Authors: Olivier Rousse (Université Grenoble Alpes),

Benoît Sévi (Université deNantes)

Presenters: Benoît Sévi (Université de Nantes)

### Volatility and asymmetry in oil price transmission

**Authors:** Stephan Silvestre (Paris School of Business) **Presenters:** Stephan Silvestre (Paris School of Business)

### Room: Syros

### 6. Regional energy supply and security issues

Chair: Roula Inglesi-Lotz (University of Pretoria)

### Revisiting the EU-Russia energy cooperation: Challenges in a new global energy era

**Authors:** Pedro Camacho (Instituto Português de Relações Internacionais Universidade Nova de Lisboa), Carla Fernandes (Instituto Português de Relações Internacionais Universidade Nova de Lisboa)

**Presenters:** Pedro Camacho (Instituto Português de Relações Internacionais - Universidade Nova de Lisboa)

# Energy innovation and corruption perception index in emissions process: Evidence through the EKC hypothesis

Authors: Daniel Balsalobre Lorente (University of Castilla La Mancha),

Muhammad Shahbaz (Montpellier Business School)

**Presenters:** Daniel Balsalobre Lorente (University of Castilla La Mancha)

# The potential of alternative fuels in Kenya: Entrepreneurial opportunities from imperfect markets

Authors: Ahmad Rahnema (IESE Business School), George Njenga (Strathmore

University), Geoffrey Ronoh (Strathmore University) **Presenters:** Ahmad Rahnema (IESE Business School)

### How can Bangladesh prepare for the new era of global energy transition?

Authors: Sakib Bin Amin (North South University), Muntasir Murshed (North South

University), Fatema Tul Jannat (North South University) **Presenters:** Muntasir Murshed (North South University)

## Examining the energy rebound effect in South Africa within a BRICS countries context

**Authors:** Roula Inglesi-Lotz (University of Pretoria) **Presenters:** Roula Inglesi-Lotz (University of Pretoria)

### 16:30 - 17:00 Plenary Session

TITLE: Sheikhs vs. Shale: What's next for OPEC?

James Smith, Co-editor, The Energy Journal

### 17:00 - 19:00 Plenary Session

**Keynote Address: Michael Verriopoulos,** Secretary General, Ministry of Environment and Energy, Greece

### TITLE: The role of distribution in the new energy era

- Energy related smart grids, smart meters and their efficient management
- E-mobility and the future of electric vehicles. What are the implications on electricity production and grid management?
- Decentralized networks: anticipated fact or future faux?
- Can CNG and/or small-scale LNG be applied in Greece in a commercially viable way?

### • The case of power networks

**Session Chair: Spiros Papaefthimiou,** Vice-President, HAEE; Associate Professor, Technical University of Crete

- 1. Nicholas Chatziargyriou, Chairman & CEO, HEDNO S.A.
- 2. Amela Ajanovic, Professor, Technical University of Vienna
- 3. Georgios Papaefthymiou, Expert Power System Operation and Security, Elia Grid International

### • The case of gas networks

Session Chair: Michalis Thomadakis, Director Energy Sector, Grant Thorton

- 4. Sotiris Nikas, CEO & Chairman, DESFA
- 5. Thodoris Terzopoulos, CEO, DEDA
- 6. Anastasios Tosios, Distribution Operating Director, EDA Attikis
- 7. Rudy Van Beurden, Communications & Public Affairs Manager, Fluxys
- 8. Ioannis Kirkinezis, Business Development Director, Hill International
- 9. Stavros Mountelos, General Director, Environmental & Energy Projects, EDIL Hellas

### 20:00 Cocktail Reception

**Keynote Address: Stergios Pitsiorlas,** Deputy Minister of Economy and Development, Greece

## **Saturday - May 20, 2017**

08:00 - 09:00 Coffee and Registration

09:00 - 11:00 Concurrent Sessions (7-10)

Room: Syros

### 7. Energy efficiency

Chair: Efthimios Zervas (Hellenic Open University)

### Impacts of climate change on energy production efficiency

**Authors:** Valsami Georgaki (University of Western Macedonia), Vasiliki Toka (University of Western Macedonia), Ioannis Stergiou (University of Western Macedonia), Dimitris Kolokotronis (University of Western Macedonia), Efthimios Tagaris (University of Western Macedonia), Rafaella-Eleni Sotiropoulou (University of Western Macedonia)

**Presenters:** Valsami Georgaki (University of Western Macedonia), Rafaella-Eleni Sotiropoulou (University of Western Macedonia)

### Consumer energy efficiency decision making

**Authors:** Michalis Skourtos (Agricultural University of Athens), Areti Kontogianni (University of Western Macedonia), Eleanor Denny (Trinity College Dublin), Steffen Kallbekken (CICERO), Ibon Galarraga (Basque Centre for Climate Change), Andrej Gubina (University of Ljubljana), Christos Tourkolias (Centre for Renewable Energy Sources)

**Presenters:** Michalis Skourtos (Agricultural University Of Athens)

# Environmental and energy efficiency analysis of EU electricity industry: An almost spatial two stages DEA approach

**Authors:** Simona Bigerna (University of Perugia), Carlo Andrea Bollino (University of Perugia), Maria Chiara D'Errico (University of Perugia), Paolo Polinori (University of Perugia)

**Presenters:** Paolo Polinori (University of Perugia)

# Residence characteristics, occupants behavior and energy efficiency: a case study in Athens

**Authors:** Chrisaugi Vogiatzi (Hellenic Open University), Georgia Gemenetzi (Hellenic Open University), Efthalia Massou (Hellenic Open University), Efthimios Zervas (Hellenic Open University)

**Presenters:** Efthimios Zervas (Hellenic Open University)

# Energy use andoccupants' behavior in bioclimatic and typical social housing estate: a comparison between Pefki solar village and Aharnes II settlement

**Authors:** Akrivi Stavraka (Hellenic Open University), Georgia Gemenetzi (Hellenic Open University), Spiros Papaefthimiou (Technical University of Crete), Efthalia Massou (Hellenic Open University), Efthimios Zervas (Hellenic Open University)

Presenters: Efthimios Zervas (Hellenic Open University)

### Room: **Delos**

### 8. Renewables: Future challenges and technological innovations

Chair: Nikolaos Thomaidis (Aristotle University of Thessaloniki)

### Integration of renewable energy in Greek energy markets: A case study

**Authors:** Caroline Palmer (Fulbright Foundation) **Presenters:** Caroline Palmer (Fulbright Foundation)

# Comparing the national strategies in China and Germany to utilize solar energy and develop photovoltaic industries

**Authors:** Yuan Xu (The Chinese University of Hong Kong) **Presenters:** Yuan Xu (The Chinese University of Hong Kong)

### The economics of solar photovoltaic (PV) energy

**Authors:** Amro M. Elshurafa (Kapsarc), Carlo Andrea Bollino (University of Perugia and Kapsarc), Shahad Albardi (Kapsarc), Simona Bigerna (University of Perugia)

Presenters: Carlo Andrea Bollino (University of Perugia and Kapsarc)

### Solar energy technologies: Integrated collector storage water heaters

**Authors:** Spiros Papaefthimiou (Technical University of Crete), Constantin Zopounidis (Technical University of Crete),

Manolis Souliotis (University of Western Macedonia)

Presenters: Manolis Souliotis (University of Western Macedonia)

# Renewable energy sources policies in the EU assessment with a Bayesian DSGE model

**Authors:** Amedeo Argentiero (University of Perugia), Carlo Andrea Bollino (University of Perugia), Silvia Micheli (University of Perugia), Iordanis Kalaitzoglou (Audencia

**Business School**)

Presenters: Silvia Micheli (University of Perugia)

# Assessing the potential of a mixed portfolio of renewables to replace fossil-fuel capacity

Authors: Nikolaos Thomaidis (Aristotle University of Thessaloniki),

Francisco Santos-Alamillos (University of Jaén)

Presenters: Francisco Santos-Alamillos (University of Jaén)

### Room: Corfu I

### 9. The new era of global energy transition

Chair: Gavin Kretzschmar (EADA Business School)

# Does the environmental Kuznets curve exist for the most polluting countries? A decomposed analysis of China and India

**Authors:** Muhammad Shahbaz (Montpellier Business School), Mantu Kumar Mahalik (National Institute of Technology (NIT)),

Thi Hong Van Hoang (Montpellier Business School)

Presenters: Thi Hong Van Hoang (Montpellier Business School)

# Energy security performance in Japan under different socioeconomic and energy conditions

Authors: Ken'ichi Matsumoto (Nagasaki University), Haruka Ikuta (The University of

Shiga Prefecture), Hiroto Shiraki (The University of Shiga Prefecture)

Presenters: Ken'ichi Matsumoto (Nagasaki University)

# The transition from the national to the EU model of energy governance: Rethinking energy policy

**Authors:** Roberto Cardinale (University College London) **Presenters:** Roberto Cardinale (University College London)

# A conceptual framework for developing the cost of capital of stakeholders: Case study of sustainable Hockerton Ltd

Authors: Geeta Lakshmi (University of Lincoln), Muhammad Khan (University of

Lincoln), Dimitrios Vortelinos (University of Lincoln) **Presenters:** Dimitrios Vortelinos (University of Lincoln)

# Does globalization intensify energy demand in high, middle and low income countries? The significance of time lags and leads

**Authors:** Muhammad Shahbaz (Montpelier Business School) **Presenters:** Muhammad Shahbaz (Montpelier Business School)

### Endgame for China's era of state 'funded' deal discounts

**Authors:** Gavin Kretzschmar (EADA Business School) **Presenters:** Gavin Kretzschmar (EADA Business School)

### Room: Corfu II

### 10. The future of Green transportation

Chair: Amela Ajanovic (Vienna University of Technology)

# A Strategy Tripod Perspective on Business Model Innovation of Emerging Industry: A Focus on China's Electric Vehicles Industry

Authors: Suxiu Li (Beijing Jiaotong University), Ari Kokko (Copenhagen Business School),

Yingqi Liu (Beijing Jiaotong University)

**Presenters:** Yinggi Liu (Beijing Jiaotong University)

### Grid connection of shared electric vehicles

Authors: Anjali Nursimulu (Ecole Polytechnique Federale de Lausanne (EPFL)),

Thomas Weber (Ecole Polytechnique Federale de Lausanne (EPFL))

Presenters: Anjali Nursimulu (Ecole Polytechnique Federale de Lausanne (EPFL))

### Tourists' willingness to pay for green transportation in a protected area in Italy

**Authors:** Simona Bigerna (University of Perugia), Carlo Andrea Bollino (University of Perugia), Silvia Micheli (University of Perugia), Paolo Polinori (University of Perugia)

**Presenters:** Simona Bigerna (University of Perugia)

### The ports as smart micro-grids: Development perspectives

**Authors:** Petros Katsikas (Protasis S.A.), Thekla Boutsika (Protasis S.A.), John Prousalidis (National Technical University of Athens), Dimitrios Lyridis (National Technical University of Athens), Christos Papaleonidas (National Technical University of Athens), Stefanos Dallas (National Technical University of Athens), Theodoros Kourmpelis (National Technical University of Athens), Vassilis Georgiou (Protasis S.A.), Dimosthenis Spathis (Protasis S.A.), Panayiotis Mitrou (Hellenic Lloyds S.A.)

Presenters: Vassilis Georgiou (Protasis S.A.)

### Assessing the environmental efficiency of Greek cruise ports

**Authors:** Spiros Papaefthimiou (Technical University of Crete), Alexandra Maragkogianni (Technical University of Crete)

**Presenters:** Alexandra Maragkogianni (Technical University of Crete)

### The future role of alternative fuels in the transport sector

**Authors:** Amela Ajanovic (Vienna University of Technology) **Presenters:** Amela Ajanovic (Vienna University of Technology)

### 11:00 - 13:00 Concurrent Sessions (11-14)

Room: **Delos** 

# 11. Intelligent and sustainable management of environment and water resources

Chair: Spiros Papaefthimiou (Technical University of Crete)

### Sustainable water management and the 2030 development agenda

**Authors:** Alexandros Makarigakis (UNESCO) **Presenters:** Alexandros Makarigakis (UNESCO)

# Integrated marine and inland water management: a programme funded by the European Economic Area (EEA)

**Authors:** Xrysoula Kourteli (Head of Special Agency for Coordination, Ministry of Environment and Energy of Environmental Projects (SACEP)), Dimitris Stamatiadis (Special Agency for Coordination, Ministry of Environment and Energy of Environmental Projects (SACEP)), Dimitra Koumparou (Special Agency for Coordination, Ministry of Environment and Energy of Environmental Projects (SACEP))

**Presenters:** Dimitra Koumparou (Special Agency for Coordination, Ministry of Environment and Energy of Environmental Projects (SACEP))

# Intelligent system for sustainable management of water networks: Application in the island of Crete

**Authors:** Tasos Pouliezos (Technical University of Crete), Sveinung Sægrov (NTNU), Spiros Papaefthimiou (Technical University of Crete)

Presenters: Tasos Pouliezos (Technical University of Crete)

### Water supply & irrigation infrastructure of the OAK SA:

Systems & methods of optimal management & energy saving

Authors: Triantafyllia Nikolaou (Organization for the Development of Crete S.A.

(OAK SA))

Presenters: Triantafyllia Nikolaou (Organization for the Development of Crete S.A.

(OAK SA))

### Climate change and water resources governance

**Authors:** Nikolaos Nikolaidis (Technical University of Crete) **Presenters:** Nikolaos Nikolaidis (Technical University of Crete)

# A world where every drop counts: Products, solutions and services for the complete water cycle

**Authors:** Nikos Makrakos (ABB SA) **Presenters:** Nikos Makrakos (ABB SA)

### Intelligent and sustainable management of water resources

Authors: Tasos Pouliezos (Technical University of Crete),

Sveinung Sægrov (NTNU), Spiros Papaefthimiou (Technical University of Crete),

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

### Room: Syros

### 12. Fuel Cells and Hydrogen: from R&D efforts to reality

Chair: George Marnellos (University of Western Macedonia)

### Hydrogen energy from the past, for the present and the future of the planet: The technologies of hydrogen production and applications

**Authors:** Spyros Voutetakis (Chemical Process and Energy Resources Institute) **Presenters:** Spyros Voutetakis (Chemical Process and Energy Resources Institute)

### Metal Hydride Hydrogen Compressors and their integration in island micro-grids

Authors: Emmanuel Stamatakis (Diadikasia S.A. / NCSR Demokritos),

Thanos Stubos (NCSR Demokritos)

Presenters: Thanos Stubos (NCSR Demokritos)

### Hydrogen and fuel cell technologies for space applications

**Authors:** Stella Balomenou (CPERI/CERTH), Kalliopi-Maria Papazisi (CPERI/CERTH), Dimitrios Tsiplakides (Aristotle University of Thessaloniki and CPERI/CERTH) **Presenters:** Dimitrios Tsiplakides (Aristotle University of Thessaloniki and CPERI/CERTH)

### Fuel cells and hydrogen technologies: Implementation and funding opportunities

Authors: Pedro Guedes de Campos (Fuel Cells and Hydrogen Joint Undertaking), Nikolaos Lymperopoulos (Fuel Cells and Hydrogen Joint Undertaking)

Presenters: Pedro Guedes de Campos (Fuel Cells and Hydrogen Joint Undertaking)

# Photoelectrochromic windows for energy saving and power production in buildings. Recent developments and future prospects

**Authors:** George Leftheriotis (University of Patras), Alexandros Dokouzis (University of Patras), Krystallia Theodosiou (University of Patras) **Presenters:** George Leftheriotis (University of Patras)

# Remediation of Black Sea ecosystem via $\rm H_2S-H_2O$ co-electrolysis in a proton-conducting membrane reactor for "green" $\rm H_2$ production: A feasibility study of the integrated approach

**Authors:** Dimitris Ipsakis (CPERI/CERTH), Tzouliana Kraia (University of Western Macedonia), Michalis Konsolakis (Technical University of Crete), George Marnellos (University of Western Macedonia)

Presenters: George Marnellos (University of Western Macedonia)

Room: Corfu

### 13. Global and EU climate policy and emissions trading schemes

Chair: Ricardo Marto (International Monetary Fund (IMF))

The impacts of a carbon floor price on the electricity sector

**Authors:** Boris Solier (University Paris-Dauphine) **Presenters:** Boris Solier (University Paris-Dauphine)

Could market making be profitable in the European carbon market?

**Authors:** Kostas Andriosopoulos (ESCP Europe Business School), Emilios Galariotis (Audencia Business School), Iordanis Kalaitzoglou (Audencia Business School)

Presenters: Iordanis Kalaitzoglou (Audencia Business School)

### A multicriteria assessment approach to the energy trilemma

**Authors:** Athanasios Pliousis (Technical University of Crete), Kostas Andriosopoulos (ESCP Europe Business School), Michael Doumpos (Technical University of Crete),

Emilios Galariotis (Audencia Business School)

Presenters: Athanasios Pliousis (Technical University of Crete)

# Achieving industrial emission reduction – Insights from a comparative analysis of the EU low carbon roadmap vs. industrial subsector roadmaps

**Authors:** Nele Friedrichsen (Fraunhofer Institute for Systems and Innovation Research ISI), Gizem Erdogmus (Fraunhofer Institute for Systems and Innovation Research ISI) **Presenters:** Nele Friedrichsen (Fraunhofer Institute for Systems and Innovation Research ISI)

# The 2-pool system. A new gas oriented electricity market design towards a sustainable european energy future

**Authors:** Georgios Papadakis (Samaras & Associates Consultant Engineers S.A.) **Presenters:** Georgios Papadakis (Samaras & Associates Consultant Engineers S.A.)

# The impact of the EU Emissions Trading Scheme (EU ETS) on firms' performance and energy efficiency

**Authors:** Georgia Makridou (ESCP Europe Business School), Kostas Andriosopoulos (ESCP Europe Business School), Michael Doumpos (Technical University of Crete), Spiros Papaefthimiou (Technical University of Crete),

Emilios Galariotis (Audencia Business School)

Presenters: Georgia Makridou (ESCP Europe Business School)

### Emissions and growth: Trends and cycles in an integrated world

**Authors:** Ricardo Marto (International Monetary Fund (IMF)), Gail Cohen (National Academy of Sciences, Engineering and Medicine), Joao Jalles (International Monetary Fund (IMF)), Prakash Loungani (International Monetary Fund (IMF))

Presenters: Ricardo Marto (International Monetary Fund (IMF))

Room: Corfu II

### 14. Investment opportunities in the energy sector

Chair: Ken'ichi Matsumoto (Nagasaki University)

### How innovation and disruption is reshaping the future of the power sector

**Authors:** Fereidoon Sioshansi (Menlo Energy Economics) **Presenters:** Fereidoon Sioshansi (Menlo Energy Economics)

# Investors' perspective on determinants of foreign direct investment in renewable energy in developing economies - What is really significant?

**Authors:** Alexander Keeley (Kyoto University), Ken'ichi Matsumoto (Nagasaki University) **Presenters:** Alexander Keeley (Kyoto University)



### Investor herding and dispersing in the renewable energy sector

**Authors:** Yimeng Yu (Macquarie University), Stefan Trück (Macquarie University)

**Presenters:** Yimeng Yu (Macquarie University)

# Energy Performance Contracting for tertiary sector Barriers, opportunities and applications

**Authors:** Theocharis Tsoutsos (Technical University of Crete) **Presenters:** Theocharis Tsoutsos (Technical University of Crete)

# Powering Kenya: Understanding the landscape and exploring possibilities for investments

Authors: Felix Sanchez Broco (IESE Business School), Ahmad Rahnema (IESE Business

School), Loice Kerubo (Strathmore University)

Presenters: Felix Sanchez Broco (IESE Business School)

### Fisikon - Internal corporate venturing of a new automobile fuel in Greece

Authors: Georgios Chatzopoulos (DEPA S.A.), Stefanos Economidis (DEPA S.A.)

Presenters: Georgios Chatzopoulos (DEPA S.A.)

# Investment constraints for major energy projects in SE Europe and energy investment potential over 2016-2025

**Authors:** Nicholaos Sofianos (Institute of Energy for South East Europe), Dimitrios Mezartasoglou (Institute of Energy for South East Europe), Costis Stambolis (Institute of Energy for South East Europe)

Presenters: Costis Stambolis (Institute of Energy for South East Europe)

### 13:00 - 14:00 Plenary Ses

### **Plenary Session & Conclusions**

Keynote Address: Michael Jefferson, Editor, Energy Policy

TITLE: The landscape ahead: Slow uphill progress?

NOTE: All Plenary Sessions on the 18th and 19th will take place in the

Aegean Ballroom



# THE LANDSCAPE IN THE NEW ERA of ENERGY TRANSITION:

Challenges, investment opportunities and technological innovations







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