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7th AIEE Energy Symposium
virtual conference - 14-16 December, 2022

Conference Program

Current and Future Challenges to Energy Security

the energy crisis, the impact on the transition roadmap

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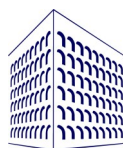
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Dear Energy Colleague,

The **Italian Association of Energy Economists - AIEE**, affiliate of the **International Association for Energy Economics - IAEE**, is organizing the **7th AIEE Energy Symposium on Energy Security - 2022**, in cooperation with the **SDA Bocconi School of Management**, of Milan, programmed as usual for **mid December**.

Although we are on the cusp of winning our battle against the pandemic, there is still uncertainty regarding travelling around the world, due also to the international situation, which could make difficult for some participants to attend.

Therefore we decided that the AIEE Energy Symposium 2022 will be organized as a **virtual online conference** hoping that with our next edition we will all be able to meet again in a normal face to face event,

The **AIEE Energy Symposium on Energy Security** has become an important yearly appointment and an opportunity to discuss energy security, climate change, to explore new and existing trends, creative solutions of new technologies, the emergence of new market conditions and of new market operators.

An appointment we do not want to miss!

After the crisis of COVID-19, energy security will remain an important issue of the world energy policy and the key for a more resilient society. The pandemic has set in motion the largest drop in global energy

investment in history, with spending expected to plunge in every major sector this year – from electricity to renewables and energy efficiency.

The overall share of global energy spending that goes to clean energy technologies – including renewables, efficiency, carbon capture, utilization and storage – has been stuck at around one-third in recent years. Power sector spending is on course to decrease by 10% in 2020, with worrying signals for the development of more secure and sustainable power systems. Energy efficiency, a central pillar of clean energy transitions, is suffering too. Estimated investment in efficiency and end-use applications is set to fall by an estimated 10–15%. The slowdown in spending on key clean energy technologies also risks undermining the much-needed transition to more sustainable energy systems.

The **AIEE Symposium** will be a forum to discuss all these problems, continuing the dialogue of the past editions analyzing the transformations of the concept of energy security in this new context.

A comprehensive program, with Plenary sessions and keynote presentations, and several concurrent sessions will give the attendees from all over the world the occasion to participate in an interactive, collaborative networking and information-sharing event, in the prestigious context of the **SDA Bocconi School of Management** (which was ranked 3rd in the Financial Times' European Business School Ranking and 8th in the world for business and management studies).

ORGANIZATION

GENERAL CONFERENCE CHAIR: G.B. ZORZOLI, President, AIEE, Italy

STEERING COMMITTEE CHAIR: CARLO DI PRIMIO, Vice President, AIEE, Italy

ORGANIZATION COMMITTEE CHAIR: CARLO ANDREA BOLLINO, Professor University of Perugia, Honorary President, AIEE, Italy

SCIENTIFIC COMMITTEE CHAIR: MATTEO DI CASTELNUOVO, Director, Master in Sustainability and Energy Management (MaSEM) e SDA Associate Professor of Practice in Energy Economics, Italy

PROGRAM COMMITTEE CHAIR: CECILIA CAMPOREALE, Research scientist, Technical and Strategic Support Unit of Department for Sustainability (SSPT-STs), ENEA, Italy

ORGANIZATION AND COORDINATION: ANKA SERBU, External Relations & Communication, AIEE, Italy

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THE PROGRAMME COMMITTEE

CHAIR: CECILIA CAMPOREALE, Research scientist, Technical and Strategic Support Unit of Department for Sustainability (SSPT-STs), ENEA, Italy

Fabio Catino, Program Manager at Treccani, Founder & CTO of Rocket Capital Investment, Italy - **Gianluca Carrino**, Senior Analyst, AIEE, Italy - **Barbara Di Giovanni**, Researcher, Enea, Italy - **Marco Falcone**, Government Relations and Issues Manager, Esso Italiana, ExxonMobil Group, Italy - **Mario Iannotti**, Advisor, Italian Ministry of Ecological Transition and WWF, Italy - **Silvia Orchi**, Researcher, Enea, Italy - **Emanuele Peschi**, Research scientist, Institute for Environmental Protection and Research – ISPRA, Italy - **Stefano Pogutz**, Professor, Sustainability Lab, SDA Bocconi School of Management, Italy - **Maximilian Rinck**, Independent energy consultant, Germany - **Gianluca Salviotti**, Associate Professor of Practice, Devo Lab, SDA Bocconi School of Management, Italy - **Elisa Scarpa**, Head of market analysis, Edison, Italy.

Conference Secretariat

AIEE - Italian Association of Energy Economists
Phone: +39 06 3227367 - Email: assaiee@aiee.it; aiee@aieesyposium.eu

Conference agenda

December 14, 2022

15:30-17:00 Opening Session – Welcome Address

15.20-15.30 test of the technical settings with the speakers

15.30-17.00 session

G.B. Zorzoli, AIEE President, Conference General Chair

Matteo Di Castelnuovo, Director, Master in Sustainability and Energy Management (MaSEM) e SDA Associate Professor of Practice in Energy Economics, President of the Program Committee

Carlo Di Primio, AIEE Past President, Steering Committee Chair

Carlo Andrea Bollino, Honorary President AIEE, Chair of the Organization Committee and IAEE past President

Keynote speakers:

Majid Al Moneef, Chair of the IAEE 2023 Committee, Chairman of the International Advisory Committee of King Abdullah Petroleum Studies and Research Center (KAPSARC)

Perspectives of the impact of energy transitions on the oil and gas producing states

Guido Bortoni, President CESI

Ensuring energy security while keeping an unbumped decarbonisation pattern

Fereidoon Sioshansi, President Menlo Energy Economics, USA

The Ukraine crisis: Who are the winners and losers?

Lu-Tao Zhao, Professor in School of Management and Economics and deputy director of the Center for Energy and Environmental Policy Research, Beijing Institute of Technology, China

How does the crowd sentiment of investors affect international crude oil prices? Evidence from COVID-19 pandemic

December 15, 2022

09.00 -10.30 Virtual concurrent session (cycle 1-4) - 1h.30'

08.50-09.00 test of the technical settings with the speakers

09.00-10.30 session

01 Solar Energy Market : trend, industry analysis and forecast

Chair: Silvana Mima, Senior Researcher at the Centre National de la Recherche Scientifique (CNRS) at Grenoble Applied Laboratory (GAEL), France

02 The Electricity market: risks and opportunities

Chair: Nevenka Hrovatin, Professor School of Economics and Business, University of Ljubljana, Slovenia

03 Energy efficiency and renewable energy

Chair: Anna Creti, Professor Université Paris Dauphine, France

04 Energy transition and energy security efforts: part I

Chair: Antonio Geracitano, Head of Relations with stakeholders and Academia, Terna, Italy

10.40 -11.40 Dual Plenary Sessions - 1h.00'

10.30-10.40 test of the technical settings with the speakers

10.40-11.40 session

The Roadmap to 2050 and the energy security concerns

Chair: Alberto Biancardi, Director of studies and international relations GSE (the Italian Energy Service System Operator), Italy

Regulatory challenges and market developments

Chair: Massimo Ricci, Director of the Wholesale Energy Markets and Environmental Sustainability Department and head of Energy Division of ARERA - The Italian Energy Authority

11.50-13.20 Virtual concurrent session (cycle 5-8) - 1h.30'

11.40-11.50 test of the technical settings with the speakers

11.50-13.20 session

05 Towards carbon neutrality, E-mobility and Energy independence in EU

Chair: Fulvio Fontini, Professor of Economics at the University of Padua, Italy

06 Special Session: Energy security concerns in the member states of the SEE

Chair: Ionut Purica, Executive Director of the Advisory Center for Energy and Environment, Romania

07 The fossil fuel perspective

Chair: Davide Tabarelli, President NE Nomisma Energia, Italy

08 Special Session: Energy and Carbon Market

Chair: Lu-Tao Zhao, Professor in School of Management and Economics and deputy director of the Center for Energy and Environmental Policy Research, Beijing Institute of Technology, China

13.20 -14.20 Break

14.30-16.00 Dual Plenary Sessions - 1h.30'

14.20-14.30 test of the technical settings with the speakers

14.30-16.00 session

Energy industry challenges to a low-carbon economy, the RES and gas role in the transition

Chair: Carlo Di Primio, AIEE Vice President, Italy

Sustainable mobility challenges for the transition targets

Chair: G.B. Zorzoli, AIEE President, Italy

16.10 -17.40 Virtual concurrent session (cycle 9-12) - 1h.30'

16.00-16.10 test of the technical settings with the speakers

16.10-17.40 session

09 Circular economy and energy communities

Chair: Gianluca Carrino, Senior Analyst AIEE, Italy

10 Potential of new solution: some evidences

Chair: Peter D. Lund, Professor in Advanced Energy Systems, Aalto University, Finland

11 The resilience in the electricity market

Chair: Rosaria Vega Pansini, Parliamentary Budget Office - Sectoral Analysis Service, Italy

12 Road to sustainable revolution: Hydrogen and energy recovery

Chair: Livio De Santoli, Professor in Energy Management, Sapienza University of Rome, Department DIAEE, School of Engineering, Italy

December 16, 2022

09.00 -10.30 Virtual concurrent session (cycle 13-16) - 1h.30'

08.50-09.00 test of the technical settings with the speakers

09.00-10.30 session

13 Energy transition and energy security efforts: part II

Chair: **Çelik Çiğdem** Professor Istanbul Okan University, Turkey

14 Geopolitics of energy: challenges and changing

Chair: **Lucia Visconti Parisio**, Professor of Public Economics, University of Milano-Bicocca, Italy

15 Economic and financial aspects of the energy market

Chair: **Maximilian Rinck**, Head of "New Concepts and Technologies" at VIK e.V., Germany

16 Energy and economy: examples of interconnection

Chair: **Arturo Lorenzoni**, Professor, University of Padua, Italy

10.40 -11.40 Dual Plenary Sessions - 1h.00'

10.30-10.40 test of the technical settings with the speakers

10.40-11.40 session

Grid security and new technologies

Chair: **Luciano Martini**, Director Department of Transmission and Distribution Technologies, RSE (Energy Systems Research), Italy

Energy Efficiency and the future strategies of the energy industry

Chair: **Aaron Praktiknjo**, Chair for Energy Systems Economics at RWTH Aachen University.
President of the German Association for Energy Sciences, Germany

12.00 -13.00 Dual Plenary Sessions - 1h.00'

14.20-14.30 test of the technical settings with the speakers

14.30-15.30 session

The Hydrogen revolution and the future of clean energy

Chair: **Carlo Andrea Bollino**, AIEE Honorary President, Professor University of Perugia, Italy

The Energy security in the new geopolitical context

Chair: **Roberto Poti**, Vice President Confindustria Energia, Italy

Conference Program

December 14, 2022

15:30-17:00 **The Opening Session – Welcome Address**

December 15, 2022

09.00 -10.30 **Virtual concurrent sessions** (cycle 1-4) - 1h.30'

08.50-09.00 test of the technical settings with the speakers

09.00-10.30 session

1. Solar Energy Market: trend, industry analysis and forecast

Chair: **Silvana Mima**, Senior Researcher at the Centre National de la Recherche Scientifique (CNRS) at Grenoble Applied Laboratory (GAEL), France

Willingness to pay for uninterrupted electricity supply from interconnected solar mini-grids in a developing economy

Presenter: Dilinna Lucy Nwobi, University of Ibadan, Nigeria
Authors: Alexander Akolo, Dilinna Lucy Nwobi, Adejumoke Akinbusoye

Forming solar business prosumers class: the case of Ukraine

Presenter: Iryna Sotnyk, Sumy State University, Ukraine
Author: Iryna Sotnyk, Tetiana Kurbativa

EU Energy Resilience, A Financial Analysis of Extra-Territorial Solar PV Power Plants as a Solution

Presenter: Amir Alborz Moezzi, Shahid Beheshti University, Iran
Authors: Amir Alborz Moezzi, Alireza Shadmand, Fazel M.Farimani

3. Energy efficiency and renewable energy

Chair: **Anna Creti**, Professor Université Paris Dauphine, France

How Does the Provincial Renewable Energy Demand Evolve under Multiple Influence Factors? An Empirical Study Based on Chinese Data

Presenter: Siqi Meng, China University of Petroleum, China
Authors: Siqi Meng, Renjin Sun

Evaluating the interaction between energy efficiency, demand response and electric system reliability

Presenter: Nicola Sorrentino, University of Calabria, Italy
Authors: Nicola Sorrentino, Daniele Menniti, Anna Pinnarelli, Fiorella Stella, Gaetano Polizzi

Potential reduction projection of residential energy consumption and analysis of local economic impact with a perspective on traditional timber houses in Japan--a case study of Kyoto city

Presenter: Yan Chuyue, Kyoto University, Graduate School of Energy Science, Japan
Authors: Seiichi Ogata, Hideki Nakata, Mitsuru Sato, Yan Chuyue

Explicit demand response for small end-users and independent aggregators

Presenter: Iolanda Saviuc, European Commission DG JRC, Italy,
Author: Paolo Bertoldi, Iolanda Saviuc

2. The Electricity market: risks and opportunities

Chair: **Nevenka Hrovatin**, Professor School of Economics and Business, University of Ljubljana, Slovenia

Strategic interaction between wholesale and ancillary service markets

Presenter: Douglas Silveira, University of Alberta, Canada
Authors: David Brown, Andrew Eckert, Douglas Silveira

Robustness analysis of power systems with a high share of renewables

Presenter: Natalia Naval, University of Zaragoza, Spain
Authors: Jose M. Yusta, Natalia Naval, Jorge Delgado

On the impact of nuclear power generation on electricity spot prices: A French perspective

Presenter: François Benhmad, Montpellier University, France
Authors: François Benhmad, Jacques Percebois

Coupling European long-term electricity market with joint energy and transmission right auction – Institutional setting, market mechanism and grid modelling comparison between nodal pricing and flow based zonal pricing

Presenter: Diyun Huang, University of Leuven, Belgium
Authors: Diyun Huang and Geert Deconinck

4. Energy transition and energy security efforts (part I)

Chair: **Antonio Geracitano**, Head of Relations with stakeholders and Academia, Terna, Italy

Energy Transition and Energy Security in Germany: A Path to Sustainability and Security

Presenter: Ridwan Rusli, Cologne University of Applied Sciences, Germany
Authors: Ridwan Rusli, Youngho Chang, Jackson Teh

Peaceful uses of nuclear energy in less industrialized countries: challenges, opportunities and acceptance

Presenter: Adam Cohen, Pontificia Universidad Católica de Chile
Authors: Jeffrey Binder, Adam Cohen, Antonio Muller, Ricardo Raineri

CO₂ Capture and segregation technologies

Presenter: Sofia Bufoli, University of Rome, La Sapienza, Italy
Author: Sofia Bufoli

Valuing Mining Resource Information and Search

Presenter: Akira Maeda, The University of Tokyo, Japan
Author: Akira Maeda

10.40 -11.40 **Dual Plenary Sessions** - 1h.00'

10.30-10.40 test of the technical settings with the speakers

10.40-11.40 session

The roadmap to 2050 and the energy security concerns

Chair: **Alberto Biancardi**, Director of studies and international relations · GSE (The Energy Service System Operator), Italy

Marco Falcone, Government Relations and Issues Manager, Esso Italiana, Exxon Mobil Group, Italy

Silvia Pariente-David, Consultant on energy and climate change and Senior advisor – Center for Mediterranean Integration, France

Alicia Mignone, Senior Energy Advisor, MAECI and Ex President of the IEA Committee on Energy Research and Technology, Italy

Angela Picciariello, Senior Researcher, International Institute for Sustainable Development - IISD

Regulatory challenges and market developments

Chair: **Massimo Ricci**, Director of the Wholesale Energy Markets and Environmental Sustainability Department and Head of Energy Division of ARERA - The Italian Energy Authority

Ozge Ozden, Secretary General ELDER - Association of Electricity Distribution, Turkey

Giordano Colarullo, Director General, Utilitalia, Italy

Elisa Scarpa, Deputy Director Market Strategy & Structuring Edison, Italy

11.50-13.20 **Virtual concurrent sessions** (cycle 5-8) - 1h.30'

11.40-11.50 test of the technical settings with the speakers

11.50-13.20 session

5. Towards carbon neutrality, E-mobility and Energy independence in EU

Chair: **Fulvio Fontini** Professor of Economics at the University of Padua, Italy

Towards carbon neutrality and energy independence in Europe: Can new storage and renewables push fossil fuels out?

Presenter: Milien Dhorne, Université Paris Nanterre, France
Authors: Milien Dhorne, Marc Baudry

Collaborative governance for European cross-border network investments – Building inclusive institutions

Presenter: Diyun Huang, Electa department, University of Leuven Energy Ville, Belgium
Authors: Diyun Huang, Geert Deconinck

Impact of e-mobility on distribution systems: the role of smart tariffs for vehicle grid integration

Presenter: Marco Cabano, CESI, Italy
Authors: Marco Cabano, Bruno Cova, David Dresco, Luca Migliorini, Pierluigi Vicini

Feasibility study for the construction of a demonstration plant for the production of E-fuels

Presenter: Franco Del Manso, UNEM, Italy
Authors: Franco Del Manso

6. Special Session: Energy security concerns in the member states of the SEE

Chair: **Ionut Purica**, Executive Director of the Advisory Center for Energy and Environment, Romania

Outlook of Energy situation in SEEurope

Presenter: Costis Stambolis, Chairman IENE Thessaloniki, Greece
Author: Costis Stambolis,

Study of Energy Independence of European Countries in the Context of New Global Security Challenges.

Presenter: Michail Zgurovsky, Rector, University of Kyiv, Ukraine
Authors: Michail Zgurovsky, et.al.

Objectives and Priorities of SEE2030 Strategy – a Regional attempt for sustainable development in SEEurope

Presenter: Arslan Umut Ergezer, Coordinator SEE2030 Strategy, Turkey
Author: Arslan Umut Ergezer

Security and Resilience in the Energy Sector of Romania

Presenter: Mihai Sanduleac, Faculty of Energetics, Politehnic University Bucharest
Authors: Mihai Sanduleac, Horia Necula

7. Fossil fuel perspective

Chair: **Davide Tabarelli**, President NE Nomisma Energia, Italy

Research on Carbon Peak Path of Petroleum and Petrochemical Industry from the Perspective of Different Responsibilities

Presenter: Feng Guo, China University of Petroleum, China
Authors: Feng Guo, Renjin Sun

One great pool, but with varying depth: dynamic efficiency of global crude oil markets?

Presenter: Marc Gronwald, Xi'an Jiaotong-Liverpool University, UK-China
Authors: Marc Gronwald, Sania Wadud, Kingsley Dogah

The interconnections between Fossil Fuel Subsidy Reforms and biofuel mandates

Presenter: Robin Argueyrolles, University of Basel, Switzerland
Authors: Robin Argueyrolles, Ruth Delzeit

Extractives: challenges and opportunities for the South in the energy transition

Presenter: Ricardo Raineri, Pontificia Universidad Católica de Chile, Chile
Authors: Adam Cohen, Ricardo Raineri

8. Special Session - Energy and Carbon Market

Chair: **Lu-Tao Zhao**, Professor School of Management and Economics, Deputy director Center for Energy and Environmental Policy Research, Beijing Institute of Technology, China

Allocation of China's carbon emission allowance considering regional carbon transfer

Presenter: Jie-Ying Zhou, Shenzhen University, China
Authors: Jie-Ying Zhou, Quan-De Qin

Peak load shaving key issues and strategies of high-proportion renewable energy power systems

Presenter: Ze-Ping Hu, North China Electric Power University
Author: Ze-Ping Hu, Jin-Liang Zhang

Does carbon market affect risk spillovers between the energy and industry stock market?

Presenter: Hai-yi Liu, University of science and technology Beijing, China
Authors: Hai-yi Liu, Ming-Fang Li

Impact of Russian-Ukraine war on energy markets: A forecast-based event assessment

Presenter: Rui-Xiang Qiu, Beijing Institute of Technology, China
Authors: Rui-Xiang Qiu, Lu-Tao Zhao

13.20 -14.20 – Break

14.30-16.00 **Dual Plenary Sessions** - 1h.30'

14.20-14.30 test of the technical settings with the speakers

14.30-16.00 **session**

Energy industry challenges to a low-carbon economy, the RES and gas role in the transition

Chair: **Carlo Di Primio**, AIEE Vice President, Italy

Luca Bragoli, Chief Regulatory & Public Affairs Officer
ERG, Italy

Alessio Cipullo, Head of Technical Affair Elettricità Futura, Italy

Tamer Emre, Director of Market Operation EPIAŞ - Energy Exchange Istanbul (EXIST), Turkey

Xavier Rousseau, Senior Vice President Strategy and Market Analysis, Snam

Lorenzo Mottura, EVP Strategy, Corporate Development & Innovation, Edison, Italy

Sustainable mobility challenges for the transition targets

Chair: **G.B. Zorzoli**, AIEE President, Italy

Amela Ajanovic, Associated Professor, Vienna University of Technology, Austria

Mariarosa Baroni, President NGV Italy

Leonardo Artico, Head Industry and Skills Development, Motus-E, European Platform for Mobility, Italy

Franco Del Manso, International Environment Affairs Manager UNEM - Energy Union for Mobility, Italy

Sandro Neri, General Manager Federmanager, Italy

Federico Boffa, Professor Libera Università of Bolzano, Italy

16.10 -17.40 Virtual concurrent sessions (cycle 9-12) - 1h.30'

16.00-16.10 test of the technical settings with the speakers

16.10-17.40 session

9. Circular economy and energy communities

Chair: Gianluca Carrino, Senior Analyst AIEE, Italy

Circular economy, patents and industrial designs: evidence from European countries

Presenter: Enrico Gabriele, LUMSA University, Italy

Authors: Enrico Gabriele

Renewable energy communities: benefits behind the self consumption

Presenter: Nicola Sorrentino, University of Calabria, Italy

Authors: Nicola Sorrentino, Daniele Menniti, Anna Pinnarelli, Fiorella Stella, Gaetano Polizzi

Energy communities evaluation: a cost-benefit approach

Presenter: Marina Bertolini, University of Padova, Italy

Authors: Marina Bertolini

11. The resilience in the electricity market

Chair: Rosaria Vega Pansini, Parliamentary Budget Office - Sectoral Analysis Service, Italy

Time-varying price elasticity of electricity demand

Presenter: Jieyang Chong, University of Reading, U.K.

Authors: Jieyang Chong, Jacopo Torriti

Current development on the German day-ahead spot market: curse or blessing for the utilization of flexibility by households?

Presenter: Judith Stute, Fraunhofer Research Institution for Energy Infrastructures and Geothermal Systems, Germany

Authors: Judith Stute, Matthias Kühnbach

Using retrospective modeling to inform choices in developing bottom-up electricity system models

Presenter: Xin Wen, University of Geneva, Switzerland

Authors: Xin Wen, Marc Jaxa-Rozen, Evelina Trutnevyte

On the possible ways out of the power market conundrum after the big peak for gas in Europe

Presenter: Giovanni Bernardo, The University of Naples

Federico II, Italy

Authors: Giovanni Bernardo, Francesco Marghella

10. Potential of new solutions: some evidences

Chair: Peter D. Lund Professor in Advanced Energy Systems, Aalto University, Finland

How sustainable is cogeneration? a long-term, real-life evaluation

Presenter: Giuseppe Dell'Olio, GSE SpA

Authors: Giuseppe Dell'Olio

The historical evolution of determinants of energy efficient retrofits in residential sector

Presenter: Janez Dolšak, School of Economics and Business University of Ljubljana, Slovenia

Author: Janez Dolšak

Long term impact of hybrid heat pumps (HHP) on electricity supply security – case study with French energy system

Presenter: Zixuan Wang, MINES ParisTech, PSL Research

University, CMA – Center for Applied Mathematics, France

Authors: Zixuan Wang, Edi Assoumou, Antoine Monnet

12. Road to sustainable revolution: Hydrogen and energy recovery

Chair: Livio De Santoli, Professor University La Sapienza, Italy

Energy Transition: H₂ and chemicals from waste, an innovative approach

Presenter: Giacomo Rispoli, MyRechemical, NextChem – Maire

Tecnimont Group, Italy

Author: Giacomo Rispoli

A cost-benefit analysis on different energy scenarios for Sardinia: methanization versus electrification, renewables, and hydrogen

Presenter: Linda Cerana, University of Padua, Italy

Authors: Linda Cerana, Arturo Lorenzoni

Investment and operational optimization for future hydrogen infrastructure: A Belgian case study

Presenter: Negar Namazifard, KU Leuven, Belgium

Authors: Negar Namazifard, Erik Delarue, Pieter Vingerhoets

Prospects of e-fuels

Presenter: Matteo C. Romano, Dipartimento di Energia, Politecnico di Milano

Authors: Matteo C. Romano, Angelo Lunghi, Gabriele Migliavacca

December 16, 2022

09.00 -10.30 Virtual concurrent session (cycle 13-16) - 1h.30'

08.50-09.00 test of the technical settings with the speakers

09.00-10.30 session

13. Energy transition and energy security efforts: (part II)

Chair: **Çelik Çiğdem** Professor İstanbul Okan University, Turkey

24/7 carbon free energy: system-level impacts of hourly clean electricity markets, and lessons from the UK on their implementation

Presenter: Sebastian Porter, University SDA Bocconi, Italy,
Author: Sebastian Porter

Security as a Changing Parameter/Factor in Foreign Energy and Security Policy and the Implementation: The Case of the European Union and People's Republic of China in Central Asia

Presenter: Johanna G.B. Rust, Foundation of the German Economy, Ruhr-Universität Bochum, Germany
Author: Johanna G.B. Rust

Risks in the energy system and a multivalued modal logic approach to identify adverse cyber events

Presenter: Ionut Purica, Executive Director of the Advisory Center for Energy and Environment, Romania
Author: Ionut Purica

15. Economic and financial aspects of the energy market

Chair: **Maximilian Rinck**, Head of "New Concepts and Technologies" at VIK e.V., Germany

Financial Transparency and Cross-Border Mergers and Acquisitions in the Extractives Industries

Presenter: Şevkat Özgür Speitmann, University of Vienna, Austria
Authors: Şevkat Özgür Speitmann, Raffael Speitmann

Challenges determining the capacity value by using the effective load carrying capacity in power systems transitioning to net zero carbon emissions

Presenter: Jorge Moreno, Partner at inodú
Authors: Jorge Moreno, Donny Holaschutz, Altamiro Piña, Lucas Neira

Selling under other skies when energy prices skyrocket: how do the companies adapt their export strategy when energy prices rise?

Presenter: Stéphanie Monjon, Université Paris Dauphine - PSL Research University, France
Authors: Damien Dussaux Stéphanie Monjon

14. Geopolitics of energy: challenges and changing

Chair: **Lucia Visconti Parisio**, University of Milan-Bicocca, Italy

Carbon dioxide emission baseline forecasts for Saudi Arabia using the structural time series model and autometrics

Presenter: Jeyhun Mikayilov, KAPSARC, Saudi Arabia
Authors: Jeyhun Mikayilov, Anwar Gasim, Lester Hunt

Social Cues and Electricity Consumption: Evidence from a Randomized Control Trial in Armenia

Presenter: Yermone Sargsyan, Institute of Economic Studies Charles University Prague, Czech Republic
Author: Yermone Sargsyan, Salim Turdaliev, Silvester van Koten,

The price of gas in Europe: toward an epochal change

Presenter: Vittorio D'Ermo, Luiss University, Italy
Authors: Vittorio D'Ermo, Diego Gavagnin

16. Energy and economy: examples of interconnection

Chair: **Arturo Lorenzoni**, Professor, University of Padua, Italy

The PULVIRUS Project: A Pilot Study to Evaluate the Impact of COVID-19 on the Italian Economy and Energy System

Presenter: Antonio Caputo, ISPRA, Italy
Authors: Cecilia Camporeale, Antonio Caputo, Emanuele Peschi

Electricity Consumption, Foreign Direct Investments, Carbon dioxide Emissions and Economic Growth in Uganda

Presenter: Geoffrey Mutumba, Kyambogo University, Uganda
Authors: Geoffrey Mutumba, Tomson Odongo

Measuring multi-scale connectedness between green bonds and equities using a Thick Pen method

Presenter: Marc Gronwald, Xi'an Jiaotong-Liverpool University, UK-China
Authors: Marc Gronwald, Sania Wadud

10.40 -11.40 Dual Plenary Sessions - 1h.00'

10.30-10.40 test of the technical settings with the speakers

10.40-11.40 session

Grid security and new technologies

Chair: **Luciano Martini**, Director Department of Transmission and Distribution Technologies, RSE (Energy Systems Research), Italy

Salvatore Pinto, President Axpo Italy

Massimo Salvetti, Grid Modernization & Innovation Director, CESI, Italy

Simone Botton, Head of Network Operation and Maintenance at Enel Grids, Italy

Energy Efficiency and the future strategies of the energy industry

Chair: **Aaron Praktijnjo** - Chair for Energy Systems Economics at RWTH Aachen University. President of the German Association for Energy Sciences, Germany

Livio De Chicchis, Energy management analyst, Italian Federation for energy efficiency – FIRE, Italy

Federico Santi, Professor University of Rome "La Sapienza"

Giuseppe Mastropieri, CEO REA Srl - Reliable Energy Advisors, Italy

12.00 -13.00 Dual Plenary Sessions - 1h.00'

14.20 -14.30 test of the technical settings with the speakers

14.30 -15.30 session

The Hydrogen revolution and the future of clean energy

Chair: **Carlo Andrea Bollino**, AIEE Honorary President, Professor University of Perugia, Italy

Shahid Hasan, Senior Research Fellow KAPSARC, Saudi Arabia

Alessio Gambato, Technology Development Manager Decarbonization Projects, Snam, Italy

Marco Pezzaglia, Founding Partner Efficiencyknow, Chairman COGEN Europe, Italy

The Energy security in the new geopolitical context

Chair: **Roberto Potì**, Vice President Confindustria Energia, Italy

Roberto Potì, Vice President Confindustria Energia, Italy

Alessandro Giraud, Professor of International Finance and Geopolitics ISG and INSEEC-Paris, France

Martin Vladimirov, Director Energy and Climate Program Center for the Study of Democracy, Bulgaria

Simone Mori, Head of Europe at the Enel Group, Italy
