

The American College of Greece  
September 21 - 24, 2022

**17<sup>th</sup>** IAEE  
European  
Energy  
Conference

The Future of Global  
Energy Systems

ORGANIZED BY:

**IAEE**  
International Association for  
ENERGY ECONOMICS

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**Concurrent Sessions**

**Draft Agenda**

01

Thursday, September 22, 2022

Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens

17.00-18.30 EEST | Room 400

Session Petroleum

Session Chair: Muhammad Akimaya

### **Oil spot price forecasting with variable uncertainty: a review of some novel methods**

Author: Krzysztof Drachal

Presenter: Krzysztof Drachal

Faculty of Economic Sciences, University of Warsaw

### **An International Comparison of OPEC Announcements Effect on Stock Indices**

Authors: Constantin Mellios<sup>1</sup>, Amine Loutia<sup>1</sup> & Kostas Andriosopoulos<sup>2</sup>

Presenter: Amine Loutia

<sup>1</sup> University Paris 1 Panthéon-Sorbonne <sup>2</sup> Audencia Business School

### **Macroeconomic Indicators and Stock Price: An Empirical Analysis on the United States Listed Oil Enterprises**

Authors: Kostas Andriosopoulos<sup>1</sup>, Kyriaki Kosmidou<sup>2</sup>, Dimitrios Kousenidis<sup>2</sup>, Ioannis Negakis<sup>3</sup> & Victoria Patsika<sup>4</sup>

Presenter: Dimitrios Kousenidis

<sup>1</sup>Audencia Business School <sup>2</sup> School of Economics; Aristotle University of Thessaloniki, Greece <sup>3</sup> Plymouth Business School; University of Plymouth, <sup>4</sup> UK Cardiff Business School; University of Cardiff



02

**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 401**

**Session Natural Gas**

**Session Chair: Laura Huomo**

**Designing a model for the cost-optimal decommissioning and refurbishment investment decision for gas networks: application on a real test bed in Austria until 2050**

Authors: Hans Auer & Sebastian Zwickl-Bernhard

Presenter: Sebastian Zwickl-Bernhard

Energy Economics Group (EEG), Technische Universität Wien

**A note on the effectiveness of supply-side climate policies in the European natural gas market**

Authors: Daan Hulshof & Machiel Mulder

Presenter: Daan Hulshof

University of Groningen

**EU liberalization policies and natural gas prices: Understanding the current energy crisis**

Author: Roberto Cardinale

Presenter: Roberto Cardinale

School of Business, The American University in Cairo

**How dependent are European electricity systems and economies on natural gas?**

Authors: Christina Kockel<sup>1</sup>, Lars Nolting<sup>1</sup>, Kevin Pacco<sup>2</sup>, Carlo Schmitt<sup>2</sup>, Albert Moser<sup>2</sup> & Aaron Praktiknjo<sup>1</sup>

Presenter: Christina Kockel

<sup>1</sup>RWTH Aachen, Institute for Future Energy Consumer Needs and Behavior (FCN)

<sup>2</sup>RWTH Aachen, Institute for High Voltage Equipment and Grids, Digitalization and Energy Economics (IAEW)



03

Thursday, September 22, 2022

Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens

17.00-18.30 EEST | Room 402

Session: Nuclear Energy

Session Chair: Anas Abuzayed

**Early nuclear power plant phase-out and nuclear decommissioning funds in the New York electricity market**

Authors: Muhammad Maladoh Bah & Hannes Weigt

Presenter: Muhammad Maladoh Bah

University of Basel

**Invention, innovation, and diffusion of nuclear reactor technologies: a multi-level analysis applied to the nuclear sector of the United States**

Authors: Fanny Böse, Björn Steigerwald & Christian von Hirschhausen

Presenter: Fanny Böse

Technische Universität Berlin

**Nuclear bias in energy scenarios – a review and results from an in-depth analysis of long-term decarbonization scenarios**

Authors: Jens Weibezahn<sup>1,2</sup>, Björn Steigerwald<sup>2</sup>, Christian Breyer<sup>3</sup> & Christian von Hirschhausen<sup>n2</sup>

Presenter: Björn Steigerwald

<sup>1</sup>Copenhagen School of Energy Infrastructure <sup>2</sup>Technische Universität Berlin <sup>3</sup>Lappeenranta University of Technology

**Nuclear in a decarbonized European power system: Insights from a capacity expansion and power system simulation model**

Authors: Arthur Lynch<sup>1</sup>, Yannick Perez<sup>1</sup>, Sophie Gabriel<sup>1</sup>, Gilles Mathonnière<sup>1</sup>, Sergio-Leo Vargas-Aranda<sup>1</sup> & Valentin Satge<sup>2</sup>

Presenter: Arthur Lynch

<sup>1</sup>Institute for Techno-Economics of Energy Systems (I-tésé), French Alternative Energies and Atomic Energy Commission (CEA), Université Paris Saclay <sup>2</sup>Université Grenoble-Alpes



04

**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 403**

**Session: Electricity 1**

**Session Chair: Michael Pollitt**

**Energy community ex-post electricity and cost allocation in practice – the Austrian example**

Author: Bernadette Fina

Presenter: Bernadette Fina

AIT Austrian Institute of Technology

**Impacts of traffic data on day-ahead residential load forecasting**

Authors: Aksornchan Chaianong, Christian Winzer & Mario Gellrich

Presenter: Aksornchan Chaianong

Center for Energy and the Environment, School of Management and Law, Zurich University of Applied Sciences

**Deployment of industry-flexibility for TSO-DSO coordinated redispatch in Austria**

Authors: Regina Hemm, Tara Esterl, Helfried Brunner, Barbara Herndler, Sawsan Henein, Sophie Knöttner, Christian Schützenhofer, Sarah Wimmer, Viktor Zobernig

Presenter: Regina Hemm

AIT Austrian Institute of Technology

**The impact of energy transition on local grid costs and consequences for yardstick regulation: empirical analysis for the Netherlands**

Authors: Floris van Montfoort<sup>1</sup>, Peter T. Dijkstra<sup>2</sup> & Machiel Mulder<sup>1</sup>

Presenter: Floris van Montfoort

<sup>1</sup>University of Groningen <sup>2</sup>Authority for Consumers and Markets



05

**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 404**

**Session: Electricity 2**

**Session Chair: Jonas Savelsberg**

**Agent modeling of terre and mari balancing markets to study the economic impact of market order standardization**

Authors: Florent Cogen<sup>1,2</sup>, Fabien Roques<sup>2</sup>, Frédéric Bienvenu<sup>1</sup> & Virginie Dussartre<sup>1</sup>

Presenter: Florent Cogen

<sup>1</sup>Réseau de Transport d'Électricité <sup>2</sup>Université Paris Dauphine-PSL

**Decarbonizing the industry sector and its effect on electricity transmission grid operation - implications from a modelbased analysis for Germany**

Authors: Martin Lieberwirth & Hannes Hobbie

Presenter: Martin Lieberwirth

TU Dresden, Chair of Energy Economics

**Combining congestion management methods in near real-time balancing platforms**

Authors: Marie Girod<sup>1,2</sup>, Efthymios Karangelos<sup>3</sup>, Emily Little<sup>1,2</sup>, Viktor Terrier<sup>2</sup>, Virginie Dussartre<sup>2</sup>, Jean-Yves Bourmaud<sup>2</sup>, Oualid Jouini<sup>1</sup> & Yannick Perez<sup>1</sup>

Presenter: Marie Girod

<sup>1</sup>CentraleSupélec <sup>2</sup>Réseau de Transport d'Électricité <sup>3</sup>Université de Liège

**Integration of electric vehicles into transmission grids: A case study on the generation-load adequacy in Europe in 2040**

Authors: Rémi Lauvergne<sup>1,2</sup>, Yannick Perez<sup>2</sup> & Mathilde Françon<sup>1</sup>

Presenter: Rémi Lauvergne

<sup>1</sup>Réseau de Transport d'Electricité <sup>2</sup>CentraleSupelec



06

**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 405**

**Session: Renewables 1**

**Session Chair: César De Jesús**

**Renewables expansion and supporting infrastructures for a net-zero energy system transition of Germany by 2050**

Authors: Mengzhu Xiao, Shima Sasanpour, Hedda Gardian, Sonja Simon, Carina Harpprecht & Thomas Pregger

Presenter: Mengzhu Xiao

German Aerospace Centre (DLR), Institute of Networked Energy Systems

**Wind power development in Germany: spatial planning instruments and externality trade-offs**

Authors: Charlotte Geiger, Paul Lehmann, Philip Tafarte, Elisabeth Wolfram

Presenter: Philip Tafarte

Leipzig University

**Bringing power to the people of Uganda: determinants of solar photovoltaics adoption in Uganda**

Authors: Grace Alinaitwe

Presenter: Grace Alinaitwe

School of Economics and Business, Norwegian University of Life Sciences

**Spatial analysis of the effects of the dismantling of end-of-life wind turbines in Germany**

Authors: Imke Rhoden, Stefan Vögele & Andrew Ross

Presenter: Imke Rhoden

Institute of Energy and Climate Research -Systems Analysis and Technology Evaluation, Forschungszentrum



07

Thursday, September 22, 2022

Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens

17.00-18.30 EEST | Room 413

Session: Renewables 2

Session Chair: Anna Sandhaas

**Optimization of wave overtopping in nearshore wave energy converter systems**

Authors: George Romosios & Theofanis Karambas

Presenter: George Romosios

Aristotle University of Thessaloniki, Civil Engineering Department

**Economic assessment of district heating potentials in EU-27 countries**

Authors: Mostafa Fallahnejad, Lukas Kranzl, Marcus Hummel & Andreas Müller

Presenter: Mostafa Fallahnejad

Energy Economics Group (EEG), Technische Universität Wien

**Two-stage stochastic optimization of district heating and cooling system investment and dispatch with high shares of geothermal sources and aquifer thermal energy storage**

Authors: Sebastian Zwickl-Bernhard & Hans Auer

Presenter: Marcus Otti

Energy Economics Group (EEG), Technische Universität Wien

**Spatial clustering of renewable timeseries for region generation in European electricity expansion planning models**

Authors: Kristof Phillips, Jorge A. Moncada, Hakan Ergun & Erik Delarue

Presenter: Kristof Phillips

KULeuven





08

**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 414**

**Session: Energy & the Environment 1**

**Session Chair: Lisa Ryan**

**Investigation of citizens' attitudes towards energy transition. Evidence from the region of Western Macedonia - Greece**

Author: Maria Spyraiki

Presenter: Maria Spyraiki

European Parliament, Nea Dimokratia Party

**Building a climate resilient Hellenic electricity distribution network: impact assessment of extreme weather events through case study analysis, mitigation interventions and adaptation best practices based on lessons learnt from international experience**

Authors: Aikaterini Gkika<sup>1</sup>, Dr. Efstratios Zacharis<sup>2</sup>, Asterios Zafeirakis<sup>2</sup> & Dr. Efthymios Lekkas<sup>1</sup>

Presenter: Aikaterini Gkika

<sup>1</sup>National & Kapodistrian University of Athens <sup>2</sup>Hellenic Electricity Distribution Network Operator

**Development of a methodological framework for enhancing the resilience of military infrastructure against climate change impacts/case study: 116 Combat Wing, Araxos, Ahaia, Greece**

Authors: Ilias Manolis<sup>1</sup>, Dr. Athanasios Sfetsos<sup>2</sup>, Pr. Christos Makropoulos<sup>3</sup> & Antonios Skouloudis<sup>4</sup>

Presenter: Ilias Manolis

<sup>1</sup>Head of Hellenic Ministry's of National Defence Department of Infrastructure and Environmental Protection <sup>2</sup>Environmental Research Laboratory Institute of Nuclear & Radiological Sciences & Technology, Energy & Safety National Centre for Scientific Research "Demokritos" <sup>3</sup>School of Civil engineering, National Technical University of Athens <sup>4</sup>Department of Environment, University of the Aegean

**What if Canada were an EU member? Canadian hydrogen policy in a European context**

Author: André Plourde

Presenter: André Plourde

Carleton University

**Economic and environmental aspects of biomass-based gases for the transport and energy sectors in the European Union**

Authors: Frank Radosits, Amela Ajanovic & Reinhard Haas

Presenter: Frank Radosits

Energy Economics Group (EEG), Technische Universität Wien



09

**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 416**

**Session: Energy & Environment 2**

**Session Chair: Guillaume Boissonnet**

**How much are individuals willing to pay to offset their carbon footprint? the role of information disclosure and social norms**

Authors: Joachim Schleich<sup>1</sup> & Sven Alsheimer<sup>2</sup>

Presenter: Joachim Schleich

<sup>1</sup>Grenoble Ecole de Management <sup>2</sup>Fraunhofer Institute Systems & Innovation Research

**Modelling Germanies energy transition within a 1.5°C-CO2-budget**

Authors: Patrick Jürgens, Julian Brandes, Markus Kaiser & Christoph Kost

Presenter: Patrick Jürgens

Fraunhofer Institute for Solar Energy Systems ISE

**Optimal selection of greenhouse gas emissions abatement measures under uncertainty: the case of Cyprus**

Authors: Marios Karmellos<sup>1</sup>, Chryso Sotiriou<sup>2</sup> & Theodoros Zachariadis<sup>1</sup>

Presenter: Marios Karmellos

<sup>1</sup>The Cyprus Institute <sup>2</sup>Cyprus University of Technology

**Did Covid-19 change the decarbonization path? a panel VECM approach**

Authors: Gonçalo Toscano Rico, Margarida Catalão-Lopes & Inês Carrilho-Nunes

Presenter: Inês Carrilho-Nunes

Instituto Superior Técnico, Universidade Lisboa

**Towards an Effective Methane Emissions Management: Monitoring, Reporting and Verification**

Author: Maria Spyraiki

Presenter: Maria Spyraiki

European Parliament, Nea Dimokratia Party



10

**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 501**

**Session: Energy Efficiency 1**

**Session Chair: Antonios Katris**

**Assessing the effect of green taxation of private cars on economic welfare in Israel**

Authors: Yanai Ankaoua, Ofir D. Rubin, Stav Rosenzweig & Aviv Steren

Presenter: Yanai Ankaoua

Ben-Gurion University of the Negev, Israel

**High speed rail and sustainable mobility: a life cycle assessment of the Spanish AVE network**

Authors: Andoni Kortazar, Gorka Bueno & David Hoyos

Presenter: David Hoyos

University of the Basque Country UPV/EHU

**Price and cross price elasticities of energy carrier specific demand in the residential sector**

Authors: Anita Thonipara

Presenter: Anita Thonipara

Institute for Small Business Economics, University of Göttingen

**Impact of energy labels on selecting houses of consumers: an experiment on flaming effects of information**

Authors: Mieko Fujisawa<sup>1</sup> & Yukihide Kurakawa<sup>2</sup>

Presenter: Mieko Fujisawa

<sup>1</sup>Kanazawa University <sup>2</sup>Kanazawa Seiryō University



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**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Grivas Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 502**

**Session: Energy Efficiency 2**

**Session Chair: Jelena Zoric**

**How the pace of residential heat electrification impacts the energy system?**

Authors: Christian F. Calvillo, Antonios Katris, Oluwafisayo Alabi, Jamie Stewart, Long Zhou & Karen Turner

Presenter: Christian F. Calvillo

Centre for Energy Policy, University of Strathclyde

**What impacts the strength of perceived barriers and drivers to energy efficiency in manufacturing small and medium-sized enterprises**

Authors: Janez Dolšak, Nevenka Hrovatin & Jelena Zorić

Presenter: Janez Dolšak

School of Economics and Business, University of Ljubljana

**Retrospective panel data study of energy-efficient retrofits: the relevance of social capital and housing-related lifestyle**

Authors: Ivana Jovović, Andreja Cirman, Nevenka Hrovatin & Jelena Zorić

Presenter: Ivana Jovović

School of Economics and Business, University of Ljubljana

**Information is power: the combined effect of regulators and retailers' actions to improve consumer welfare in residential energy markets**

Authors: Hester Huisman, Evert de Haan, Machiel Mulder & Jaap Wieringa

Presenter: Hester Huisman

University of Groningen



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**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 626**

**Session: Transportation 1**

**Session Chair: Anne Neumann**

**Economics of sustainable hydrogen-fuels for trucking, shipping, and aviation**

Authors: Jonas Martin<sup>1</sup>, Anne Neumann<sup>1</sup> & Anders Ødegård<sup>2</sup>

Presenter: Jonas Martin

<sup>1</sup>Norwegian University of Science and Technology <sup>2</sup>SINTEF

**On the energy economics of green hydrogen for driving fuel cell passenger cars**

Author: Amela Ajanovic

Presenter: Amela Ajanovic

Energy Economics Group (EEG), Technische Universität Wien

**The competition of zero-emission vehicle technologies in road freight**

Authors: Bessie Noll<sup>1</sup>, Tobias S. Schmidt<sup>1</sup> & Bjarne Steffen<sup>2,3</sup>

Presenter: Bjarne Steffen

<sup>1</sup>Energy and Technology Policy Group, ETH Zürich <sup>2</sup>Climate Finance and Policy Group, ETH Zurich <sup>3</sup>Center for Energy and Environmental Policy Research, Massachusetts Institute of Technology

**A common methodology for fuel price comparison at a common unit aligned with EU consumers perception**

Authors: Antonis Peppas<sup>1</sup>, Aristomenis Skyllakos<sup>2</sup>, Chrysa Politi<sup>1</sup>, Ilias Pasios<sup>2</sup> & Sotirios Kottaridis<sup>1</sup>

Presenter: Antonis Peppas

<sup>1</sup>School of Mining and Metallurgical Engineering, Laboratory of Metallurgy, National Technical University of Athens <sup>2</sup>Ministry of Infrastructure, Transport and Networks, Directorate of Technical Control and Vehicle Service Facilities



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**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 627**

**Session: Energy & the Economy 1**

**Session Chair: Lucia Visconti Parisio**

**The aggregate effects of the structure of information in low-carbon transition policies: an empirical application**

Authors: Darius Corbier & Frédéric Gonand

Presenter: Darius Corbier

Paris-Dauphine University PSL

**Interaction of dynamic pricing and local market considering distribution networks with high PV penetration**

Authors: Yucun Lu, Jelle Meus & Erik Delarue

Presenter: Yucun Lu

KU Leuven

**An econometric analysis of the impact of auctions on innovation in solar PV.**

Authors: Pablo Del Río González<sup>1</sup> & Leticia García-Martínez<sup>2</sup>

Presenter: Pablo Del Río González

<sup>1</sup>Spanish National Research Council <sup>2</sup>Universidad Carlos III

**Decarbonisation of industry and flexibility for the power system: technical, economic and regulatory potentials and limitations of the use of green hydrogen in the industry sector in Germany**

Authors: Marius Tillmanns, Jan Priesmann & Aaron Praktijnjo

Presenter: Marius Tillmanns

RWTH Aachen University, Institute for Future Energy Consumer Needs and Behavior (FCN), Chair for Energy System Economics



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**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 628**

**Session: Energy Security & Geopolitics 1**

**Session Chair: Jean-Pierre Favennec**

**Security analysis of generation shift key methods in the European day ahead market**

Authors: Emily Little<sup>1,2</sup>, Efthymios Karangelos<sup>3</sup>, Jean-Yves Bourmaud<sup>2</sup>, Nicolas Lhuillier<sup>2</sup> & Yannick Perez<sup>1</sup>

Presenter: Emily Little

<sup>1</sup>CentraleSupélec <sup>2</sup>Réseau de Transport d'Electricité <sup>3</sup>University of Liège

**An analysis of driving factors of CO2 emissions by final energy consumption in Africa**

Authors: Eunhye Lee & Daegon Cho

Presenter: Eunhye Lee

Graduate School of Green Growth, KAIST College of Business

**System adequacy assessment for Switzerland: How flow-based market coupling affects a non-FBMC neighbor**

Authors: Ali Darudi<sup>1</sup>, Moritz Schillinger<sup>1</sup>, Jonas Savelsberg<sup>2</sup>, Ingmar Schlecht<sup>3</sup> & Hannes Weigt<sup>1</sup>

Presenter: Ali Darudi

<sup>1</sup>University of Basel <sup>2</sup>ETH Zürich <sup>3</sup>ZHAW Winterthu

**Directional spillovers between electricity and fossil fuel prices in a hydrothermal power generation market: the case of Brazil and Canada**

Authors: Andrés Oviedo-Gómez<sup>1</sup>, Sandra Milena Londoño-Hernández<sup>1</sup> & Diego Fernando Manotas-Duque<sup>2</sup>

Presenter: Andrés Oviedo-Gómez

<sup>1</sup>School of Electrical and Electronic Engineering, Universidad del Valle <sup>2</sup>School of Industrial Engineering, Universidad del Valle



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**Thursday, September 22, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.00-18.30 EEST | Room 705**

**Session: Energy Modelling 1**

**Session Chair: Olivier Massol**

**Making the EU carbon border adjustment mechanism acceptable and climate friendly for least developed countries**

Authors: Sigit Perdana & Marc Vielle

Presenter: Sigit Perdana

LEURE-Ecole Polytechnique Fédérale de Lausanne

**Carbon tax with alternative tax-design schemes for Ethiopia: a general equilibrium analysis**

Authors: Govinda R. Timilsina<sup>1</sup> & Samuel Sebsibie<sup>2</sup>

Presenter: Govinda R. Timilsina

<sup>1</sup>World Bank, Washington, DC <sup>2</sup>World Bank Country Office, Ethiopia

**Estimating the value of distributed demand side management technologies in Central Western Europe - assessing regional differences in view of locational pricing mechanisms**

Authors: Hendrik Kramer, Florian Boehnke & Christoph Weber

Presenter: Hendrik Kramer

University Duisburg-Essen

**Asymmetric product with linked bids for the Swedish balancing market? Case study from a hydro-dominated market**

Authors: Ksenia Poplavskaya<sup>1</sup>, Stefan Strömer<sup>1</sup>, Johann Mayr<sup>1</sup> & Niclas Damsgaard<sup>2</sup>

Presenter: Ksenia Poplavskaya

<sup>1</sup>AIT Austrian Institute of Technology <sup>2</sup>Svenska kraftnät





01

Friday, September 23, 2022

Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens

17.30-19.00 EEST | Room 400

Session: Electricity 3

Session Chair: Ksenia Poplavskaya

**Environmental impacts of redispatching in the decarbonized electricity systems**

Authors: Daniel Davi-Arderius<sup>1</sup> & Tim Schittekatte<sup>2</sup>

Presenter: Daniel Davi-Arderius

<sup>1</sup>Barcelona Institute of Economics (IEB) <sup>2</sup>Massachusetts Institute of Technology

**Adoption of distributed energy resources under uncertainty: Incorporating insights from prospect theory into an agent-based model**

Authors: Jorge Andrés Moncada & Erik Delarue

Presenter: Jorge Andrés Moncada

KU Leuven, Dept. Mechanical Engineering

**New technology adoption: advanced metering infrastructure strategic implementation planning using fanp**

Authors: Erny Anugrahany<sup>1,2</sup> & Athor Subroto<sup>2</sup>

Presenter: Erny Anugrahany

<sup>1</sup>PT PLN (Persero) <sup>2</sup>Universitas Indonesia

**The impact of vector coupling on prices questions thoroughly the economics of the power system**

Authors: Marie-Alix Dupré la Tour<sup>1,2</sup>, Virginie Dussartre<sup>1</sup>, Marc Le Du<sup>1</sup> & Philippe Quirion<sup>2</sup>

Presenter: Marie-Alix Dupré la Tour

<sup>1</sup>Réseau de Transport d'Electricité (RTE) <sup>2</sup>Centre for International Research on Environment and Development (CIRED)



02

Friday, September 23, 2022

Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens

17.30-19.00 EEST | Room 401

Session: Electricity 4

Session Chair: Christophe Bonnery

**Dissemination potential in Germany of peer-to-peer energy trading and local electricity markets as an option of decentralized energy system**

Authors: César De Jesús & Niklas Hartmann

Presenter: César De Jesús

Offenburg University of Applied Sciences, Offenburg, Germany

**Assessing the potential of demand response as a source of flexibility in low-carbon power systems: insights from the French case.**

Authors: Julien Ancel & Olivier Massol

Presenter: Julien Ancel

Climate Economics Chair

**Mid-term electricity price forecasting: the role of fundamental drivers**

Authors: Niaz Bashiri Behmiri<sup>1</sup>, Carlo Fezzi<sup>2</sup> & Francesco Ravazzolo<sup>1,3</sup>

Presenter: Niaz Bashiri Behmiri

<sup>1</sup>Free University of Bozen-Bolzano <sup>2</sup>University of Trento <sup>3</sup>BI Norwegian Business School

**Energy demand and carbon emissions reduction potential of dynamic pricing of electricity: systematic review and meta-analysis of experimental evidence.**

Authors: Tarun Khanna, Jan Minx & Klaas Miersch

Presenter: Tarun Khanna

Mercator Research Institute on Global Commons and Climate Change



03

Friday, September 23, 2022

Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens

17.30-19.00 EEST | Room 402

Session: Renewables 3

Session Chair: Bjarne Steffen

**The impact of fluctuating renewables on flexibility needs in electricity systems**

Authors: Franziska Schöniger<sup>1</sup>, Ulrich Morawetz<sup>2</sup>, Gustav Resch<sup>1</sup> & Reinhard Haas<sup>1</sup>

Presenter: Franziska Schöniger

<sup>1</sup>Institute of Energy Systems and Electrical Drives, Technische Universität Wien <sup>2</sup>University of Natural Resources and Life Sciences, Wien

**A novel approach for supporting the strong uptake of wind energy in Austria**

Authors: Gustav Resch & Franziska Schöniger

Presenter: Gustav Resch

Energy Economics Group (EEG), Technische Universität Wien

**Monte Carlo simulation-based economic risk assessment in energy communities**

Authors: Klara Maggauer, Bernadette Fina & Carolin Monsberger

Presenter: Klara Maggauer

AIT Austrian Institute of Technology

**Conditions for competitive, sustainable and democratic electricity systems**

Author: Reinhard Haas

Presenter: Reinhard Haas

Energy Economics Group (EEG), Technische Universität Wien



04

Friday, September 23, 2022

Venue: American College of Greece, 6 Grivas Street, 153 42 Ag. Paraskevi, Athens

17.30-19.00 EEST | Room 403

Session: Renewables 4

Session Chair: Silke Johanndeiter

**Severity of variable renewably energy droughts in Europe**

Author: Martin Kittel

Presenter: Martin Kittel

German Institute for Economic Research (DIW Berlin)

**Economic analysis of pumped hydro storage**

Authors: Marlene Sayer, Reinhard Haas & Amela Ajanovic

Presenter: Marlene Sayer

Energy Economics Group (EEG), Technische Universität Wien

**Flexibility of hydropower in Colombia to balance the growing share of intermittent renewables**

Authors: Sara Restrepo Echeverri & Camila Ochoa

Presenter: Sara Restrepo Echeverri

Universidad EIA- Escuela de Ingeniería de Antioquia Universidad

**Unlocking Indonesia potential resources to achieve net zero emission 2060: Generation expansion planning using leap**

Authors: Satria Putra Kanugrahan<sup>1</sup> & Dzikri Firmansyah Hakam<sup>2</sup>

Presenter: Satria Putra Kanugrahan

PT PLN (Persero)<sup>1,2</sup>, Institut Teknologi PLN (ITPLN)<sup>2</sup>, Institut Teknologi Bandung (ITB)<sup>1,2</sup>



05

**Friday, September 23, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.30-19.00 EEST | Room 404**

**Session: Energy & the Environment 3**

**Session Chair: Charles Mason**

**Digital transformation of the energy system – country specific strategies for market implementation of technologies**

Author: Philipp Riegebauer

Presenter: Philipp Riegebauer

Centre of Innovative Energy Systems, University of Applied Sciences Dusseldorf, Germany

**Regulation of CCS transportation infrastructures: insights from a bi-level optimization problem**

Authors: Adrien Nicolle & Olivier Massol

Presenter: Adrien Nicolle

Climate Economics Chair

**Why do mitigation pathways differ? The role of scenario assumptions and model features**

Authors: Jim Skea, Richard Green, Alaa Al-Khourajie, Raphael Slade & Lain Staffell

Presenter: Richard Green

Imperial College London

**Trading of renewable targets – who wins and who loses**

Authors: Jan Abrell<sup>1</sup>, Sebastian Rausch<sup>1</sup> & Jonas Savelsberg<sup>2</sup>

Presenter: Jonas Savelsberg

<sup>1</sup>Department of Environmental and Climate Economics, ZEW Mannheim <sup>2</sup>Center for Energy Policy and Economics, ETH Zürich



06

**Friday, September 23, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.30-19.00 EEST | Room 405**

**Session: Energy & the Environment 4**

**Session Chair: Christian Calvillo**

**Policies for accelerating the decarbonisation of the European cement industry**

Authors: Paul Tautorat<sup>1</sup>, Natalija Ljubić<sup>2</sup>, Bjarne Steffen<sup>1</sup> & Tobias S. Schmidt<sup>1</sup>

Presenter: Paul Tautorat

<sup>1</sup>Swiss Federal Institute of Technology, ETH Zürich <sup>2</sup>Swiss Federal Institute of Technology Lausanne, EPFL Lausanne

**The importance of building export capacity in a new Scottish CO2 transport and storage industry: Alleviating domestic funding pressures and securing green growth and jobs transition**

Authors: Antonios Katris<sup>1</sup>, Karen Turner<sup>1</sup>, Oluwafisayo Alabi<sup>1</sup>, Christian Calvillo<sup>1</sup>, Jamie Stewart<sup>1</sup> & Julia Race<sup>2</sup>

Presenter: Antonios Katris

<sup>1</sup>Centre for Energy Policy, University of Strathclyde <sup>2</sup>Naval Architecture Ocean and Marine Engineering, University of Strathclyde

**From Kyoto to Glasgow: Volumes and types of unused Certified Emission Reductions (CERs)**

Authors: Raphaela Kotsch<sup>1</sup> & Regina Betz<sup>2</sup>

Presenter: Raphaela Kotsch

<sup>1</sup>University of Zurich & Zurich University of Applied Sciences <sup>2</sup>Center for Energy and the Environment (CEE), Zurich University of Applied Sciences

**Decarbonisation strategies implementing biochar as a carbon capture technology**

Authors: Meritxell Domènech Monfort, Anna Sandhaas & Niklas Hartmann

Presenter: Meritxell Domènech Monfort

Offenburg University of Applied Sciences, Offenburg, Germany



07

Friday, September 23, 2022

Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens

17.30-19.00 EEST | Room 413

Session: Energy Efficiency 3

Session Chair: Joachim Schleich

**Flexible energy system integration using concept development and demonstration for rural district heating networks in Austria**

Authors: Demet Suna<sup>1</sup>, Nicolas Pardo-Garcia<sup>1</sup>, Christian Fuchs<sup>1</sup>, Carolin Monsberger<sup>1</sup>, Ralf-Roman Schmidt<sup>1</sup> & Josef Petschko<sup>2</sup>

Presenter: Demet Suna

<sup>1</sup>AIT Austrian Institute of Technology <sup>2</sup>Agrar Plus GmbH

**Beyond energy efficiency: do consumers care about life cycle properties of household appliances?**

Authors: Mark Olsthoorn<sup>1</sup>, Antoine Durand<sup>2</sup>, Corinne Faure<sup>1</sup>, Marie-Charlotte Guetlein<sup>1</sup> & Joachim Schleich<sup>1</sup>

Presenter: Mark Olsthoorn

<sup>1</sup>Grenoble Ecole de Management <sup>2</sup>Fraunhofer Institute for Systems and Innovation Research

**How choice complexity in liberalized markets hurts the demand for green electricity**

Authors: Rebekka Bärenbold<sup>1</sup>, Manuel Grieder<sup>2</sup> & Renate Schubert<sup>2,3</sup>

Presenter: Rebekka Bärenbold

<sup>1</sup>Faculty of Business and Economics, University of Basel <sup>2</sup>UniDistance Suisse <sup>3</sup>Zurich University of Applied Sciences (ZHAW)

**Energy storage investment in Switzerland: a household model approach coupling heat and electricity**

Authors: Héctor Ramírez Molina<sup>1</sup>, Arthur Rinaldi<sup>2</sup>, Benjamin Schroeteler<sup>3</sup> & Hannes Weigt<sup>1</sup>

Presenter: Héctor Ramírez Molina

<sup>1</sup>University of Basel <sup>2</sup>University of Geneva <sup>3</sup>Lucerne University of Applied Sciences and Arts



08

**Friday, September 23, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.30-19.00 EEST | Room 414**

**Session: Energy Efficiency 4**

**Session Chair: Giuseppe Dellolio**

**Willingness to pay for energy retrofits by homeowners and landlords**

Authors: Jonas Bender & Heike Wetzel

Presenter: Jonas Bender

Institute of Economics, University of Kassel

**Model-predictive control of a residential heating system with machine-learning based models, forecasts, and signal-processing**

Authors: Oscar Villegas Mier, Sascha Niro, Federico Alpi, Rainer Gasper & Michael Schmidt

Presenter: Oscar Villegas Mier

Offenburg University of Applied Sciences, Offenburg, Germany

**Evaluating the impact of road freight uberization on the trucking sector**

Authors: Xun Xu<sup>1</sup>, Tianduo Peng<sup>2</sup>, Zhandong Xu<sup>3</sup> & Mi Gan<sup>3</sup>

Presenter: Xun Xu

<sup>1</sup>King Abdullah Petroleum Studies and Research Center (KAPSARC) <sup>2</sup>Institute of Climate Change and Sustainable Development, Tsinghua University <sup>3</sup>Southwest Jiaotong University

**Can loss aversion explain the energy efficiency gap? A stated choice experiment**

Authors: Thilo K. G. Haverkamp & Andreas Ziegler

Presenter: Andreas Ziegler

University of Kassel





09

Friday, September 23, 2022

Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens

17.30-19.00 EEST | Room 416

Session: Transportation 2

Session Chair: Miguel Palacios

**A spatio-temporal approach for EV charging infrastructure deployment**

Authors: Marc-Olivier Metais<sup>1,2</sup>, Oualid Jouini<sup>2</sup>, Yannick Perez<sup>2</sup>, Jaâfar Berrada<sup>1</sup> & Emilia Suomalainen<sup>3</sup>

Presenter: Marc-Olivier Metais

<sup>1</sup>Institut Vedecom <sup>2</sup>LGI CentraleSupelec <sup>3</sup>Syke

**Spatially distributed charging profiles for electric vehicles in Germany**

Authors: Menna Elsobki, Marius Tillmanns & Aaron Praktijnjo

Presenter: Menna Elsobki

RWTH Aachen University, Institute for Future Energy Consumer Needs and Behavior (FCN), Chair for Energy System Economics

**Spatio-temporal modeling of fast-charging along highway networks for stress-testing planned charging infrastructure capacity**

Authors: Antonia Golab, Sebastian Zwickl-Bernhard, Theresia Perger & Hans Auer

Presenter: Antonia Golab

Institute of Energy Systems and Electrical Drives, Energy Economy Group (EEG), Technische Universität Wien

**Vehicle electrification as an alternative transport fuel technology - cost-effectiveness in reducing CO2 emissions**

Authors: Tamara Sheldon<sup>1</sup>, Rubal Dua<sup>2</sup> & Omar Abdullah Alharbi<sup>3</sup>

Presenter: Rubal Dua

<sup>1</sup>University of South Carolina, USA <sup>2</sup>King Abdullah Petroleum Studies and Research Center (KAPSARC)



10

**Friday, September 23, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.30-19.00 EEST | Room 501**

**Session: Energy & the Economy 2**

**Session Chair: Frédéric Gonand**

**The effect of hydrogen production growth to the renewable energy sector**

Author: Muhammad Akimaya

Presenter: Muhammad Akimaya

King Fahd University of Petroleum and Minerals

**Demand response and curtailment in an isolated system with up to 80% variable renewables**

Authors: Sarah Stanley<sup>1</sup>, Lisa Ryan<sup>2</sup> & Damian Flynn<sup>1</sup>

Presenter: Sarah Stanley

<sup>1</sup>School of Electrical and Electronic Engineering, University College Dublin (UCD) <sup>2</sup>School of Economics, University College Dublin (UCD)

**Green bonds and the energy transition: Efficiency and social inequalities**

Authors: Verónica Acurio Vásquez & Olivier Damette

Presenter: Verónica Acurio Vásquez

University of Lorraine, BETA

**When the chips are down: an incentivized analysis of preferences for green electricity in Switzerland**

Authors: Betz Regina<sup>1</sup>, Grieder Manuel<sup>1,2</sup> & Nicklisch Andreas<sup>3</sup>

Presenter: Betz Regina

<sup>1</sup>Zurich University of Applied Sciences <sup>2</sup>University of Zurich <sup>3</sup>Zentrum für wirtschaftspolitische Forschung (ZWF), Fachhochschule Graubünden

**Easier Said than Done: A Supply-side critique of the EU's Plan to Eliminate Dependence on Russian Gas**

Author: Theodoros Tsakiris

Presenter: Theodoros Tsakiris

University of Nicosia



11

**Friday, September 23, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.30-19.00 EEST | Room 502**

**Session: Energy Access 1**

**Session Chair: Hans Auer**

**Challenges and opportunities of clean cooking program in Indonesia: the journey to net zero emission**

Authors: Dzikri Firmansyah Hakam<sup>1,2,3</sup>, Satria Putra Kanugrahan<sup>1,3</sup>, Dr. Raden Aswin Rahadi<sup>3</sup>, Dr. Herry Nugraha<sup>1</sup> & Dr. Agung Wicaksono<sup>3</sup>

Presenter: Dzikri Firmansyah Hakam

<sup>1</sup>PT. PLN (Persero) <sup>2</sup>Institut Teknologi PLN (ITPLN) <sup>3</sup>Institut Teknologi Bandung (ITB)

**What are consumers willing to pay for residential heating systems in Germany?**

Authors: Jakob Kulawik, Christina Kockel & Aaron Praktijnjo

Presenter: Jakob Kulawik

RWTH Aachen University, Institute for Future Energy Consumer Needs and Behavior (FCN)

**Impact of rising energy prices on household income and energy consumption: Analysis of efficient relief measures for the case of Germany**

Authors: Jan Priesmann & Aaron Praktijnjo

Presenter: Jan Priesmann

Chair for Energy System Economics, E. ON Energy Research Center, RWTH Aachen University

**Carbon literacy – can simple interventions help? Effect of information provision on emissions knowledge of private households**

Author: Sandra Kretschmer

Presenter: Sandra Kretschmer

Friedrich-Alexander-Universität Erlangen-Nürnberg



12

**Friday, September 23, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.30-19.00 EEST | Room 626**

**Session: Energy Security & Geopolitics 2**

**Session Chair: Adonis Yatchew**

**Assessment of the impacts and substantial implications of high levels of decarbonization and clean energy by 2030 on power markets and network operations in Southeast Europe**

Authors: Elliot Roseman<sup>1</sup>, Goran Majstrovic<sup>2</sup> & Dragana Orlic<sup>3</sup>

Presenter: Goran Majstrovic

<sup>1</sup>US Energy Association <sup>2</sup>Energy Institute Hrvoje Pozar <sup>3</sup>Electricity Coordinating Center (EKC)

**European economic impacts of cutting energy imports from Russia: a computable general equilibrium analysis**

Authors: Marc Vielle<sup>1</sup>, Sigit Perdana<sup>1</sup> & Maxime Schenckery<sup>2</sup>

Presenter: Marc Vielle

<sup>1</sup>LEURE-Ecole Polytechnique Fédérale de Lausanne <sup>2</sup>IFPEN, IFP School, France

**How can Germany avoid the next energy crisis? Impact of an import ban of Russian energy sources on climate protection goals in Germany**

Authors: Anas Abuzayed, Niklas Hartmann, Anna Sandhaas, Cesar De Jesus Tabora & Hanhee Kim

Presenter: Anas Abuzayed

Offenburg University of Applied Sciences, Offenburg, Germany

**European Union's plan for a green transition – Unleashing a policy storm or a strategic guide through the energy transition in these new circumstances?**

Author: Laura Huomo<sup>1</sup> & Cea Mittler<sup>2,3</sup>

Presenter: Laura Huomo

<sup>1</sup>Bird & Bird Attorneys Ltd <sup>2</sup>University of Helsinki <sup>3</sup>National University of Singapore

**The EU's Southern Gas Corridor Strategy and the Eastern Mediterranean after the Second Russian-Ukrainian War: Pipelines and LNG**

Author: Theodoros Tsakiris

Presenter: Theodoros Tsakiris

University of Nicosia



13

**Friday, September 23, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.30-19.00 EEST | Room 627**

**Session: Energy Modelling 2**

**Session Chair: Filippos Ioannidis**

**Generation of industrial electricity and heat demand profiles for energy system analysis**

Authors: Anna Sandhaas, Hanhee Kim & Niklas Hartmann

Presenter: Anna Sandhaas

Offenburg University of Applied Sciences, Offenburg, Germany

**Econometric analysis of reserve energy demand**

Authors: Laureen Deman & Quentin Boucher

Presenter: Laureen Deman

SuperGrid Institute, Grenoble Applied Economics Laboratory, Université Grenoble Alpes

**How flexible electrification integrates fluctuating renewables**

Authors: Leonard Göke<sup>1,2</sup> & Jens Weibezahn<sup>1,3</sup>

Presenter: Leonard Göke

<sup>1</sup>Technische Universität Berlin <sup>2</sup>DIW Berlin <sup>3</sup>Copenhagen School of Energy Infrastructure

**The role of flexibility options in deep decarbonization of the European power sector**

Authors: Ozge Ozdemir<sup>1</sup>, Anneke Vries<sup>2</sup>, Paul Koutstaal<sup>1</sup> & Lennart Bours<sup>1</sup>

Presenter: Ozge Ozdemir

<sup>1</sup>Netherlands Environmental Assessment Agency (PBL) <sup>2</sup>Utrecht University/NIOZ



14

Friday, September 23, 2022

Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens

17.30-19.00 EEST | Room 628

Session: Energy Investment & Finance 1

Session Chair: Georgia Makridou

**Reaching climate neutrality in an isolated energy system: The case of Cyprus**

Authors: Constantinos Taliotis, Theodoros Zachariadis, Elias Giannakis, Nestor Fylaktos, Marios Karmellos & Despina Yiakoumi

Presenter: Constantinos Taliotis

The Cyprus Institute

**Impact of current market distortions in commodity and energy markets on levelized costs of electricity of PV in Austria**

Authors: Carolin Monsberger<sup>1</sup> & Gustav Resch<sup>2</sup>

Presenter: Carolin Monsberger

<sup>1</sup>AIT Austrian Institute of Technology <sup>2</sup>Technische Universität Wien

**Scenarios for future trade flows of energy technologies**

Authors: Jonas Eschmann, Marlene O'Sullivan & Thomas Baldauf

Presenter: Jonas Eschmann

Institute of Networked Energy Systems, German Aerospace Center (DLR)

**The application of a new institutional economics framework to the process of decommissioning of nuclear power plants – determination of best practice approaches from France, Germany, and UK**

Authors: Alexander Wimmers<sup>1</sup>, Björn Steigerwald<sup>1</sup> & Christian von Hirschhausen<sup>1,2</sup>

Presenter: Alexander Wimmers

<sup>1</sup>Technische Universität Berlin <sup>2</sup>DIW Berlin



15

**Friday, September 23, 2022**

**Venue: American College of Greece, 6 Gravias Street, 153 42 Ag. Paraskevi, Athens**

**17.30-19.00 EEST | Room 705**

**Session: Energy Modelling 3**

**Session Chair: Kyriaki Kosmidou**

**Building-stock model based scenarios under different price signals**

Authors: Ece Özer<sup>1</sup>, Lukas Kranzl<sup>1</sup>, Andreas Müller<sup>2</sup> & Behnam Zakeri<sup>3</sup>

Presenter: Ece Özer

<sup>1</sup>Technische Universität Wien <sup>2</sup>e-think, Phone <sup>3</sup>International Institute for Applied Systems Analysis (IIASA)

**Using the Shapley value to share costs of congestion management in a realistic power grid model**

Author: Simon Voswinkel

Presenter: Simon Voswinkel

University of Duisburg-Essen, House of Energy Markets and Finance

**Piecewise Linearization and Linepack in Operation of Integrated Electricity and Gas Systems**

Authors: Christian Perau, Manuel Ruppert & Wolf Fichtner

Presenter: Christian Perau

Karlsruhe Institute for Technology, Chair of Energy Economics

**The marginal abatement costs of CO2 emissions in the European chemical sector**

Authors: Lennard Rekker, Machiel Mulder & Michaela Kesina

Presenter: Lennard Rekker

University of Groningen



01

**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens**

**10.00-11.30 EEST | Amphitheater 104**

**Session: Electricity 5**

**Session Chair: Daniel Davi-Arderius**

**Smart Market-based congestion management design for electricity markets**

Authors: Lukas Maximilian Lang, Jonas Egerer, Veronika Grimm & Ulrike Pfefferer

Presenter: Lukas Maximilian Lang

Friedrich-Alexander-University Erlangen-Nürnberg, Germany

**Regional power system flexibility management under an energy transition scenario: The case of French region occitanie**

Author: Théotime Coudray

Presenter: Théotime Coudray

Climate Economics Chair and Montpellier University

**Analysis of electricity sources impact on Lithuania's electricity market price**

Authors: Mindaugas Cesnavicius & Inga Konstantinaviciute

Presenter: Mindaugas Cesnavicius

Lithuanian Energy Institute, Laboratory of Energy Systems Research

**Assessing flexibility demand and supply in the Austrian electricity market by 2020/2030**

Authors: Gerhard Totschnigg<sup>1</sup>, Gustav Resch<sup>2</sup>, Franziska Schöniger<sup>2</sup> & Tara Esterl<sup>1</sup>

Presenter: Gustav Resch

<sup>1</sup>AIT Austrian Institute of Technology <sup>2</sup>Energy Economics Group (EEG), Technische Universität Wien





02

**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens**

**10.00-11.30 EEST | Classroom 106**

**Session: Renewables 5**

**Session Chair: Kost Christoph**

**Upscaling energy community potential to European level**

Authors: Theresia Perger & Hans Auer

Presenter: Theresia Perger

Technische Universität Wien

**Economic evaluation of onsite green hydrogen supply strategies for the industrial sector**

Authors: Jasmine Ramsebner<sup>1</sup>, Pedro Linares<sup>2</sup>, Reinhard Haas<sup>1</sup> & Albert Hiesl<sup>1</sup>

Presenter: Jasmine Ramsebner

<sup>1</sup>Energy Economics Group (EEG), Technische Universität Wien <sup>2</sup>Universidad Pontificia Comillas

**Solar prosumage: interactions with the transmission grid**

Authors: Christoph Weyhing<sup>1</sup>, Wolf-Peter Schill<sup>2</sup>, Dana Kirchem<sup>2</sup>, Christian von Hirschhausen<sup>1</sup> & Mario Kendziorski<sup>1</sup>

Presenter: Christoph Weyhing

<sup>1</sup>Workgroup for Infrastructure Policy, Technische Universität Wien <sup>2</sup>German Institute for Economic Research (DIW Berlin)

**The Market Impact of Operational Risk Events in the Energy Sector**

Authors: Sofia Kalatha<sup>1</sup>, Kyriaki Kosmidou<sup>1</sup>, Panagiotis Dontis-Charitos<sup>2</sup> & Kostas Andriosopoulos<sup>3</sup>

Presenter: Sofia Kalatha

<sup>1</sup>Department of Economics, Division of Business Administration, Aristotle University of Thessaloniki, Thessaloniki, Greece

<sup>2</sup>Department of Finance, ESCP Business School, London, United Kingdom

<sup>3</sup>Audencia Business School



03

**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens**

**10.00-11.30 EEST | Classroom 108**

**Session: Energy & the Environment 5**

**Session Chair: Georgia Giannakidou**

**Evaluating production processes and hydrogen supply routes for zero-emissions steelmaking in the EU**

Authors: Kimon Keramidas, Silvana Mima & Adrien Bidaud

Presenter: Kimon Keramidas

Université Grenoble-Alpes, France

**CO2 removal and 1.5°C: Sharing the gains from inter-regional cooperation using a game-theoretic approach**

Authors: Emma Jagu<sup>1</sup>, Solène Chiquier<sup>2</sup>, Olivier Massol<sup>1</sup> & Niall Mac Dowell<sup>2</sup>

Presenter: Emma Jagu

<sup>1</sup>Center for Energy Economics and Management, IFP School <sup>2</sup>Center for Energy Economics and Management, IFP School

**Industrial use or storage of CO2? A compound real options valuation for the retrofitting of coal-fired power plants**

Authors: Qinghan Yu & Reinhard Madlener

Presenter: Qinghan Yu

RWTH Aachen University, Aachen, Germany

**Techno-economic assessment of bio-based carbon dioxide removal using TIAM-FR**

Authors: Sophie Chlela & Sandrine Selosse

Presenter: Sophie Chlela

Mines Paris, PSL University, CMA - Centre for Applied Mathematics



04

**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens**

**10.00-11.30 EEST | Amphitheater 204**

**Session: Energy & the Environment 6**

**Session Chair: TBA**

**Energy and climate proposals in the Spanish white book on tax reform**

Authors: Xavier Labandeira

Presenter: Xavier Labandeira

Universidade de Vigo, Spain

**Quantifying climate change measures towards mitigation and adaption optimisation**

Authors: Matthew Keller, Sebastian Dickler, Dr.-Ing Noah Pflugradt, Dr.-Ing Leander Kotzur & Univ.-Prof. Dr.-Ing Detlef Stolten

Presenter: Matthew Keller

Institute for Techno-Economic Systems Analysis (IEK-3), Forschungszentrum Jülich GmbH

**Could investment in infrastructure soften the pollution haven hypothesis in developing countries?**

Authors: Rafaela Caetano<sup>1</sup>, António Cardoso Marques<sup>1</sup>, Tiago Lopes Afonso<sup>1</sup> & Isabel Vieira<sup>2</sup>

Presenter: Rafaela Caetano

<sup>1</sup>NECE-UBI, University of Beira Interior <sup>2</sup>CEGACE-UÉ, University of Évora

**The resource curse and fossil electricity: resource rents and the democracy effect**

Author: Zeynep Clulow & David Reiner

Presenter: Zeynep Clulow

EPRG, Judge Business School, University of Cambridge



05

**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens**

**10.00-11.30 EEST | Classroom 206**

**Session: Energy Efficiency 5**

**Session Chair: Philipp Riegebauer**

**Producing synfuels from CO<sub>2</sub>, biomass, and hydrogen. Resources, routes, emissions, and economics: A European overview.**

Author: Guillaume Boissonnet

Presenter: Guillaume Boissonnet

CEA I-Tésé, Saclay – Grenoble, France

**What determines consumers' responsiveness to energy costs of durable goods? evidence from the Swiss appliance market**

Authors: Adrian Obrist & Claudio Daminato

Presenter: Adrian Obrist

Center of Economic Research (CER-ETH), ETH Zürich

**The effect of information and communication technologies on energy demand: evidence from OECD countries**

Authors: Mona Chitnis<sup>1</sup>, Steve Sorrell<sup>2</sup> & Shivani Taneja<sup>3</sup>

Presenter: Mona Chitnis

<sup>1</sup>Surrey Energy Economics Centre (SEEC), School of Economics, University of Surrey, Guildford <sup>2</sup>Science Policy Research Unit (SPRU), University of Sussex <sup>3</sup>School of Economics, University of Nottingham

**Predicting prosumers, rebounds and (pro-) environmental spillovers: the case of residential photovoltaic systems**

Authors: Patrick Bigler & Benedikt Janzen

Presenter: Patrick Bigler

University of Bern



06

**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens**

**10.00-11.30 EEST | Classroom 207**

**Session: Transportation 3**

**Session Chair: Konstantinos Sfetsioris**

**A policy evaluation of electromobility in Germany**

Authors: Stefanie Wolff & Christopher Borger

Presenter: Stefanie Wolff

National Organisation Hydrogen and Fuel Cell Technology (NOW GmbH)

**Policy complementarities in the promotion of electric vehicles: subsidies and charging infrastructure**

Authors: Lavan Teja Burra, Stephan Sommer & Colin Vance

Presenter: Lavan Teja Burra

RWI – Leibniz Institute for Economic Research

**The effect of different dynamic pricing schemes on the use of e-vehicle charging infrastructure**

Authors: Paul Fabianek, Ayse Tugba Atasoy & Reinhard Madlener

Presenter: Paul Fabianek

Institute for Future Energy Consumer Needs and Behavior (FCN), RWTH Aachen University

**Total cost of ownership analysis of battery electric buses for public transport system in a small to midsize city**

Authors: Hanhee Kim & Niklas Hartmann

Presenter: Hanhee Kim

Offenburg University of Applied Sciences, Offenburg, Germany



07

**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens**

**10.00-11.30 EEST | Classroom 208**

**Session: Energy Access 2**

**Session Chair: Bernadette Fina**

**Combining simulation and optimization for optimal energy community planning with technology diversity and multiple objectives**

Authors: Miriam Schwebler & Bernadette Fina

Presenter: Miriam Schwebler

AIT Austrian Institute of Technology

**Electricity grid tariffs for electrification in households: quantifying cross-subsidies across grid users**

Authors: Claire Bergaentzlé<sup>1</sup>, Philipp Andreas Gunkel<sup>1</sup>, Mohammad Ansarin<sup>2</sup>, Yashar Ghiassi-Farrokhfal<sup>2</sup> & Henrik Klinge Jacobsen<sup>1</sup>

Presenter: Claire Bergaentzlé

<sup>1</sup>Technical University of Denmark <sup>2</sup>Erasmus University

**Reducing the risk of inc-dec gaming in redispatch. Comparative country analysis**

Authors: Viktor Zobenrig & Ksenia Poplavskaya

Presenter: Viktor Zobenrig

AIT Austrian Institute of Technology

**Data-driven household's archetypes to classify building's owner budget restrictions on investing in deep renovation**

Authors: Iná Maia<sup>1</sup>, Lukas Kranzl<sup>1</sup> & Andreas Müller<sup>2</sup>

Presenter: Iná Maia

<sup>1</sup>Technische Universität Wien <sup>2</sup>e-think



08

**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens**

**10.00-11.30 EEST | Amphitheater 304**

**Session: Energy Security & Geopolitics 3**

**Session Chair: Andre Plourde**

**Decarbonization of the Costa Rican transport sector: exploring electrification pathways for 2050**

Authors: Héctor Ramírez<sup>1</sup>, Muhammad Maladoh Bah<sup>1</sup>, Dennis Schneider<sup>2</sup> & Guido Godínez<sup>3</sup>

Presenter: Dennis Schneider

<sup>1</sup>University of Basel <sup>2</sup>University of Duisburg-Essen <sup>3</sup>University of Costa Rica

**Oil and gas between climate constraints and the need for energy and mobility**

Author: Jean-Pierre Favennec

Presenter: Jean-Pierre Favennec

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**Effects of Russian gas supply cut-off on the German gas transmission system**

Authors: Lucas De La Fuente Munita & Dominik Möst

Presenter: Lucas De La Fuente Munita

Technische Universität Dresden

**Investigating energy productivity in Africa: impact of energy efficiency and economic structural change over 1990-2017**

Authors: Dr. Liu Yang<sup>1</sup> & Dr. Brantley Liddle<sup>2</sup>

Presenter: Dr. Liu Yang

<sup>1</sup>African Development Bank <sup>2</sup>National University of Singapore



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**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens**

**10.00-11.30 EEST | Classroom 402**

**Session: Energy Investment & Finance 2**

**Session Chair: Amine Loutia**

**A green alliance with the black continent: requirements to efficiently implement a joint hydrogen economy via public-private partnerships**

Authors: Lena Schreiner & Prof. Reinhard Madlener

Presenter: Lena Schreiner

RWTH Aachen University

**Financial transparency and cross-border mergers and acquisitions in the extractives industries**

Authors: Şevkat Özgür Speitmann<sup>1</sup> & Raffael Speitmann<sup>2</sup>

Presenter: Şevkat Özgür Speitmann

<sup>1</sup>University of Vienna, Faculty of Business, Economics and Statistics <sup>2</sup>Vienna University of Economics and Business

**Bidding strategies of renewables in the Iberian electricity spot market**

Authors: Silke Johandeiter & Valentin Bertsch

Presenter: Silke Johandeiter

Ruhr-University Bochum

**Is transmission expansion for decarbonization compatible with generation competition?**

Author: Timothy Brennan

Presenter: Timothy Brennan

Resources for the Future





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**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens, Greece**

**10.00-11.30 EEST | Amphitheater 404**

**Session: Energy Investment & Finance 3**

**Session Chair: TBA**

**Modeling the impact of oil price changes and investment decisions on construction wages in the U.S.**

Authors: Nyakundi Michieka<sup>1</sup>, Noha H. A. Razek<sup>2</sup>, Richard Gearhart<sup>1</sup>, & Yiannis Ampatzidis<sup>3</sup>

Presenter: Nyakundi Michieka

<sup>1</sup>California State University, Bakersfield <sup>2</sup>University of Regina <sup>3</sup>University of Florida

**The future of renewable energy auctions: model-based assessment of long-term trends in a changing electricity system**

Authors: Jasper Geipel, Gustav Resch & Florian Hasengst

Presenter: Jasper Geipel

Energy Economics Group (EEG), Technische Universität Wien

**An analysis of the energy storage requirements of the Austrian federal state of Tyrol depending on transmission network capacities in 2050**

Author: Florian Hasengst

Presenter: Florian Hasengst

Energy Economics Group (EEG), Technische Universität Wien

**Estimation of external costs from short sea shipping. The concept of externalities surcharge**

Authors: Emmanouil Doundoulakis<sup>1</sup>, Kostas Andriosopoulos<sup>2</sup> & Spiros Papaefthimiou<sup>1</sup>

Presenter: Emmanouil Doundoulakis

<sup>1</sup>School of Production Engineering & Management, Technical University of Crete <sup>2</sup>Audencia Business School



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**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens**

**10.00-11.30 EEST | Classroom 405**

**Session: Energy Modelling 4**

**Session Chair: Dimitris Sarantaridis**

**Exploring the mechanics of hybrid markets in a context of deep decarbonization**

Authors: Alexis Lebeau<sup>1,2</sup>, Marcelo Saguan<sup>1</sup>, Marie Petit<sup>3</sup>, Yannick Perez<sup>2</sup> & Olivier Massol<sup>2,4</sup>

Presenter: Alexis Lebeau

<sup>1</sup>EDF R&D <sup>2</sup>CentraleSupélec <sup>3</sup>King Abdullah Petroleum Studies and Research Center (KAPSARC) <sup>4</sup>IFPEN, IFP School, France

**Investment in a green-hydrogen system under economic and physical uncertainties**

Authors: Luis María Abadie<sup>1</sup> & José Manuel Chamorro<sup>2</sup>

Presenter: José Manuel Chamorro

<sup>1</sup>Basque Centre for Climate Change <sup>2</sup>University of the Basque Country

**Efficient de-rating in modern capacity mechanisms and the interdependence with reliability metrics**

Authors: Paulo Brito-Pereira<sup>1</sup>, Pablo Rodilla<sup>1</sup>, Paolo Mastropietro<sup>1</sup>, Luiz Augusto Barroso<sup>1,2</sup> & Carlos Batlle<sup>1,2,3</sup>

Presenter: Paulo Brito-Pereira

<sup>1</sup>Instituto de Investigación Tecnológica, Universidad Pontificia Comillas <sup>2</sup>PSR Energy Consulting & Analytics <sup>3</sup>MIT Energy Initiative

<sup>4</sup>Florence School of Regulation

**The energy transition and the value of capacity remuneration mechanisms**

Authors: Cinzia Bonaldo, Fulvio Fontini & Michele Moretto

Presenter: Cinzia Bonaldo

Department of Management Engineering, University of Padua, Italy



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**Saturday, September 24, 2022**

**Venue: Alba Graduate Business School - ACG, 6-8 Xenias Street, 115 28, Athens**

**10.00-11.30 EEST | Classroom 406**

**Session: Energy Modelling 5**

**Session Chair: Filippos Ioannidis**

**Flexibility assessment for high shares of renewable energy**

Authors: Thomas Baldauf, Jens Schmutge, Hans Christian Gils & Jonas Eschmann

Presenter: Thomas Baldauf

German Aerospace Center (DLR), Institute of Networked Energy Systems

**Trends and long-run relations in cointegrated time series observed with noise**

Authors: Matteo Pelagatti<sup>1</sup>, Angelica Gianfreda<sup>2</sup>, Paolo Maranzano<sup>1</sup> & Lucia Parisio<sup>1</sup>

Presenter: Lucia Visconti Parisio

<sup>1</sup>DEMS, Università di Milano – Bicocca <sup>2</sup>DEMB, Università di Modena e Reggio Emilia

**Nowcasting industrial production using linear and non-linear models of electricity demand**

Authors: Giulio Galdi<sup>1</sup>, Roberto Casarin<sup>2</sup>, Davide Ferrari<sup>3</sup>, Carlo Fezzi<sup>1</sup> & Francesco Ravazzolo<sup>3</sup>

Presenter: Giulio Galdi

<sup>1</sup>University of Trento <sup>2</sup>Università Ca' Foscari Venezia <sup>3</sup>University of Bozen

**Assessing the impact of a CO2 tax at the margin, combined with a subsidy scheme for the Dutch Industry**

Authors: Marit van Hout

Presenter: Marit van Hout

Netherlands Environmental Assessment Agency (PBL)



**17<sup>th</sup>** IAEA  
European  
Energy  
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The Future of Global  
Energy Systems

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