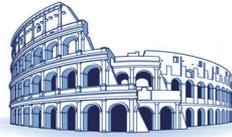


AIEE

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ITALIANA ECONOMISTI
DELL'ENERGIA

IAEE
International Association for
ENERGY ECONOMICS

9^h AIEE Energy Symposium



AIEE
2025



Conference Program

Current and Future Challenges to Energy Security

Rome, 20-22 November 2025

in cooperation with



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Editorial Note

Dear Colleague,

The Italian Association of Energy Economists - AIEE, affiliate of the International Association for Energy Economics - IAEE, is organizing the **9th AIEE Energy Symposium on Energy Security** on November 20-22, 2025, in cooperation with the scientific contribution of the Department of Astronautical, Electrical and Energy Engineering of the University of Rome "La Sapienza", as an in person event.

The AIEE Energy Symposium on Energy Security has become an important yearly appointment and an opportunity to discuss and exchange information, an opened dialogue on energy security in the context of the ongoing ecological transition. Since its first edition the AIEE Energy Symposium has made possible to analyse the transformations taking place in the process of the energy transition, exploring its implications, its strengths and weaknesses, highlighting the emerging innovations and trying to find new solutions and new technologies for this new world reality.

The 2025 edition has a special significance: ten years have passed since the ratification of the Paris Agreement, a historic agreement that has profoundly changed the policies of various countries. Climate change is now a reality which our governments must face in their economic, environmental and social development prospects, to

avoid putting at risk the future generations.

Ten years after this historic event, the trajectory of the transition is still to be explored, because the transition depends on a wide range of issues: protection of the population both as consumers and citizens, taking into account their health with respect to emissions, pollutants and economic wellness, as well as the identification of actions that each government can put in place for adaptation to climate change. Attention must be paid to energy security to ensure the availability of energy at affordable prices for the citizens and also to ensure a fair market competitiveness. Great attention must also be paid to the climate policy, as mitigation actions are not enough to fight climate change, investment in adaptation, such as the development of climate-resilient infrastructures, food systems and supply chains, is crucial.

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 **University of Rome "La Sapienza"** one of the oldest universities in Europe, in the heart of Rome, near the Colosseum.

An appointment we do not want to miss!

Organization

FELICE EGIDI, AIEE President

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

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

Paolo Boccardi, Official at the Presidency of the Council of Ministers – Department for European Affairs – Italy; **Alfonso Carfora**, Assistant professor, Department of Economics and Law, University of Macerata, Italy; **Roberto Del Ciello**, Senior Researcher, Technical and Strategic Support Unit of Department for Sustainability (SSPT-STs), ENEA, Italy; **Barbara Di Giovanni**, Senior Researcher, Technical and Strategic Support Unit of Department for Sustainability (SSPT-STs), ENEA, Italy; **Cristina Leonardi**, Technologist, Institute of Atmospheric Pollution Research, CNR, Italy; **Riccardo Liburdi**, Researcher, Department for Evaluation, Controls and Environmental Sustainability, ISPRA, Italy; **Andrea Molocchi**, Senior environmental economist, Sustainable Development and Energy Sources Department, RSE SpA, Italy; **Silvia Orchi**, Senior Researcher, Sustainable Mobility and Transport Laboratory (TERIN – DEC – MOST), ENEA, Italy; **Rosaria Vega Pansini**, Parliamentary Budget Office – Sectoral Analysis Service, Italy; **Aldo Ravazzi Douvan**, Professor at Luiss and Tor Vergata Universities, chief economist at DG Global Affairs & Sustainable Finance at MASE-Aeif/Sogesid; **Sandro Sanna**, Environmental engineer, University of Sassari and Regional Programming Center, Autonomous Region of Sardegna, Italy; **Giuseppe Scandurra**, Associate Professor, Department of Management Studies and Quantitative Methods (DISAQ), Parthenope University of Naples, Italy.

Conference agenda

Thursday, November 20, 2025

venue: *The Department of Astronautical, Electrical and Energy Engineering - Sapienza University of Rome*

14.00 **Registration**

14.30-15.30 **Opening Welcome Address** (*Aula Magna*)

Felice Egidi, AIEE President, Italy

Massimo Pompili, Scientific Committee Chair, Professor of Electrical Components and Technologies, Director of the Department of Astronautical, Electrical and Energy Engineering of the Sapienza University of Rome, Italy

Matteo Di Castelnuovo, Conference General Chair, Associate Professor of Practice of Sustainability, Director of the Master in Sustainability Management, SDA Bocconi, Italy

Nicola Procaccini, Member of the European Parliament, ECR Group Co-Chair
(*registered video message to the participants*)

Keynote speakers

Francesco La Camera, Director General IRENA

Delivering on the UAE Consensus: Tracking Progress Toward Tripling Renewable Power Capacity and Doubling Energy Efficiency by 2030

Alessandro Blasi, Special Advisor to the Executive Director, International Energy Agency – IEA
The World Energy Outlook 2025: Multiple scenarios to explore different aspects of energy security

Alexandra Thomas, Chief Executive Officer, Adriatic LNG, Italy

Energy Trilemma: the role of LNG in balancing energy security, energy equity, and environmental sustainability.

15:45-16:45 **Dual Plenary Sessions**

Grid security and energy storage

(*The Fresco Hall*)

Chair: Stefano Brogelli, Legal & Regulatory Director
Axp Italia

Stefano Brogelli, Legal & Regulatory Director di
Axp Italia

Giuseppe Cicerani, Head of Business Development
Energy Storage, Enel, Italy

Alessio Cipullo, Head of Italy and EU Public
Affairs, CESI, Italy

Francesco Peccianti, Head of the market regulation and
energy studies, ERG

Renewable energy, clean energy technologies and critical raw materials

(*The Cloister Room*)

Chair: Roberto Venafro, Head of Environment and
Climate Change, Edison

Veronica Lucia Castaldo, Deputy Director of Land and
End-use Energy Efficiency Department RSE, Italy

Marco Codognola, CEO Itelyum, Italy

Francesco Favaro, General Manager, Wateryg
International Group, UAE

Tomas Kåberger, Director, Energy Area of Advance,
Professor of Industrial Energy Policy, Chalmers University
of Technology, Sweden

Fereidoon Siohansi, President Menlo Energies, USA

18.00 -20.00 **Welcome Cocktail**

Propaganda Italian Cuisine - (Via Claudia 15, Roma)



Just a few steps from the Colosseum, the restaurant offers authentic Italian cuisine, with a focus on quality ingredients and seasonality. The carefully crafted setting combines

elegance and informality.

A welcoming atmosphere, an ideal place for those seeking an authentic gastronomic experience in the heart of Rome.

November 20, 2025 - h 18.00-20.00

Welcome Cocktail at Propaganda Italian Cuisine

a welcoming atmosphere
in a cozy place at 10 minutes walk from the venue.

Friday, November 21, 2025

venue: *The Department of Astronautical, Electrical and Energy Engineering - Sapienza University of Rome*

08.30 - 17.00 **Registration**

08.30 - 10.30 **Welcome coffee** (*Venue Hall*)

09.00 - 10.30 **Concurrent Sessions (1-4)**

01 Security and resilience of the European energy system (*The Cloister Room - Sala del Chiostro*)

Chair: Honorata Nyga-Lukaszewska, Professor SGH Warsaw School of Economics, Poland

02 Prospects for Hydrogen (*The Fresco Hall - Sala degli Affreschi*)

Chair: Raffaele Liberatore, Senior Researcher, Energy and Thermal Storage Laboratory (TERIN – SSI – EAT), ENEA, Italy

03 Energy access: the impact on local communities (*Room A*)

Chair: Alessandro Sapio, Professor, Parthenope University of Naples, Italy

04 Cancelled

10.30 - 11.30 **Dual Plenary Sessions**

Sustainable mobility challenges for the transition targets (*The Fresco Hall*)

Chair: Fulvio Fontini, Professor of Economics, University of Salento

Regulatory challenges for the electricity markets in a renewable-based energy system: the EU new market design (*The Cloister Room*)

Chair: Guido Bortoni, President CESI, Italy

11.30 -13.00 **Concurrent Sessions (5-8)**

05 Integration and management of the electricity grid (*The Cloister Room - Sala del Chiostro*)

Chair: Iacopo Savelli, Postdoctoral researcher (RTDa) in Applied Economics at the GREEN

06 The future of nuclear in Europe (*Room A*)

Chair: Federico Santi, Professor, la Sapienza University of Rome, Italy

07 Special Session on Energy communities: case studies and future trends (*The Fresco Hall*)

Chair: Nicola Sorrentino, University of Calabria, Italy

08 Pathways to Net-Zero in the Global Energy Transition (*Room B*)

Chair: Agatino Nicita, Consiglio Nazionale delle Ricerche (CNR), Institute of Advanced Technologies for Energy “Nicola Giordano” (ITAE), Italy

13.00 -14.30 **Lunch buffet**

14.30 -16.00 **Dual Plenary Sessions**

The gas role in a changing geopolitical context: natural gas, hydrogen, other renewable gases and CCUS (*The Cloister Room*)

Chair: **Carlo Di Primio**, Managing Partner, Horus Green Energy Investment, AIEE Honorary President, Italy

The EU Taxonomy Regulation, sustainable energies and ESG targets (*The Fresco Hall*)

Chair: **Adnan Shihab-Eldin**, Research Associate at the Oxford Institute for Energy Studies

16.00-17.30 **Concurrent Sessions (9-12)**

09 Integration and management of the electricity grid: some experiences (*The Cloister Room*)

Chair: Maria Teresa Vespucci, Professor, University of Bergamo, Italy

10 Global dynamics of the fossil fuel market (*Room A*)

Chair: Roberta Galli, Executive - Enterprise Commercial Development, GE Vernova, Italy

11 Energy poverty: a global challenge (*The Fresco Hall - Sala degli Affreschi*)

Chair: Pierluigi Nichilo, Independent Researcher, Italy

12 Exploring Sustainability Across Energy, Policy, and Environmental Systems (*Room B*)

Chair: Francesco Marghella, Research & Studies, Chief Transformation Office, ACEA, Italy

18.00 - 20.00 **Gala Cocktail**

at **Propaganda Italian Cuisine** - (*Via Claudia 15, Roma*)

Saturday, November 22, 2025

venue: *The Department of Astronautical, Electrical and Energy Engineering - Sapienza University of Rome*

08.30 - 11.00 **Registration**

08.30 - 10.30 **Welcome coffee**

09.00 - 10.30 **Concurrent Sessions (13-16)**

- 13 Special Session: Teaching Energy Economics and Policy – Reflections and a New Open-Access Textbook (Room A)**
Chair: Massimo Filippini, ETH Zürich and Università della Svizzera Italiana,, Switzerland
- 14 How Industry Is Moving Toward Decarbonisation (The Fresco Hall - Sala degli Affreschi)**
Chair: Emanuele Piccinno, Energy Consultant AIEE, Italy
- 15 Energy Infrastructure and Market Integration (The Cloister Room - Sala del Chiostro)**
Chair: Mario Iannotti, Energy and Environmental Senior Policy Expert at Sogesid and Italian Agency for Development Cooperation (AICS).
- 16 An overview on energy access (Room B)**
Chair: Carlo Di Primio, Honorary President AIEE, Italy

10.30 -12.00 **Concurrent Sessions (17-20)**

- 17 The challenges posed by renewable energy technologies (I) (Room A)**
Chair: Silvia Orchi, Senior Researcher, Sustainable Mobility and Transport Laboratory (TERIN – DEC – MOST), ENEA, Italy
- 18 Energy efficiency: how systems respond to energy or environmental factors (The Cloister Room)**
Chair: Francesco Castellani, Sapienza University of Rome
- 19 Cancelled**
- 20 Elements for the future: bioeconomy and CRM (The Fresco Hall - Sala degli Affreschi)**
Chair: Valeria Di Cosmo, University of Torino, Italy

12.00-13.30 **Concurrent Sessions (21-24)**

- 21 The challenges posed by renewable energy technologies (II) (Room A)**
Chair: Paolo Colbertaldo, Professor, Politecnico di Milano, Italy
- 22 The interdisciplinary nature of energy (Room B)**
Chair: Luigi Calcara, Professor, Sapienza University of Rome
- 23 Inclusive Energy Transitions and Local Energy Challenges in a Global Context (The Fresco Hall - Sala degli Affreschi)**
Chair: Cristina Cornaro, Full Professor Tor Vergata University of Rome
- 24 Energy, electrical systems and energy planning (The Cloister Room - Sala del Chiostro)**
Chair: Antonio Geracitano, *Adjunct Professor, Tor Vergata University of Rome , Italy*

13.30-14.30 **Lunch buffet**



Conference programme

Friday, November 21, 2025

09.00 - 10.30 Concurrent Sessions (1-4)

1 Security and resilience of the European energy system

(The Cloister Room - Sala del Chiostro)

Chair: Honorata Nyga-Łukaszewska, Professor SGH Warsaw School of Economics, Poland

Rethinking energy security in the European Union after 2022: from supply diversification to systemic resilience

Presenter: Magdalena Zajączkowska, Krakow University of Economics, Poland

Author: Magdalena Zajączkowska

Energy Resilience of the European Union

Presenter: Maciej Skuza, Maria Curie-Skłodowska University in Lublin, Poland

Author: Maciej Skuza

Energy Resilience and Energy Import Dependency in the EU

Presenter: Lars Nickel, Technical University of Munich, Germany

Author: Lars Nickel

Unlocking Success: Criteria for effective economic coordination in renewable energy facilities. Insights from a comparative perspective

Presenter: Pierre-Henri Bombenger, School of Engineering and Management Vaud, University of Applied Sciences and Arts Western Switzerland -Valais-Wallis, Switzerland

Authors: Pierre-Henri Bombenger, Marie-Joëlle Kodjovi

Energy security and international competitiveness of high income countries

Presenter: Honorata Nyga-Łukaszewska, SGH Warsaw School of Economics, Poland

Author: Honorata Nyga-Łukaszewska

4 Carbon regulation: Some Experiences

Cancelled



2 Prospects for Hydrogen *(The Fresco Hall)*

Chair: Raffaele Liberatore, Senior Researcher, Energy and Thermal Storage Laboratory (TERIN – SSI – EAT), ENEA, Italy

A possible step forward to green hydrogen use expansion

Presenter: Vincenzo D'Ascanio, Tiemes, Italy

Authors: Vincenzo D'Ascanio, Alice Cozzi, Claudio Meroni

Hydrogen-oxygen co-production plant in hospitals: business model and economic analysis

Presenter: Mauro Giorgianni, Istituto di Tecnologie Avanzate per l'energia "Nicola Giordano" del Consiglio Nazionale Delle Ricerche (CNR ITAE), Italy

Authors: Mauro Giorgianni, Agatino Nicita, Gaetano Maggio

Optimal Investment Strategies for Hydrogen Refueling Stations Considering On-Site Conversion Option

Presenter: JunHyung Kim, Lab of Engineering Economic Systems Analysis (LEESA), Seoul National University, Korea

Authors: JunHyung Kim, DeokJoo Lee

The Cost of Security: Analyzing Strategies to Hedge Hydrogen Import Disruption under Stochastic Representation of Weather

Presenter: Julian Keutz, Institute of Energy Economics at the University of Cologne, Germany

Authors: Julian Keutz, Jan Kopp

3 Energy access: the impact on local communities *(Room A)*

Chair: Alessandro Sapio, Professor, Parthenope University of Naples, Italy

Factors influencing use and adoption of clean cooking technologies in rural households: a case study of Morogoro region, Tanzania

Presenter: Erasto Saganda, Makerere University Business School, Tanzania

Author: Erasto Saganda

Examining energy access in resource-rich developing countries: the case of Mozambique

Presenter: Chocoroua Omar, Akita University, Japan

Authors: Chocoroua Omar, Fumiaki Inagaki

The Impact of New Energy Base Construction in China's Desert, Gobi, and Desertified (Shagehuang) Areas on Soil Organic Carbon

Presenter: Hanmin Dong, Central China Normal University, China

Authors: Hanmin Dong, Zhang Lin, Liu Yishuang

Milan 2050: A Data-Driven Vision for Urban Energy Decarbonization

Presenter: Monga Lorenzo, A2A S.p.A., Italy

Author: Monga Lorenzo

10.30 - 11.30 Dual Plenary Sessions

Sustainable mobility challenges for the transition targets

(The Fresco Hall)

Chair: Fulvio Fontini, Professor of Economics, University of Salento

Andrea Amoroso Head of Engineering Studies Department, Downstream & Petrochemical Projects, Eni Representative Enel

Marco Codognola, CEO Itelyum, Italy

Franco Del Manso, International Environment Affairs manager of UNEM

Matteo Gizzi, Head of E-mobility Market Intelligence Motus-E, Italy

Gian Marco Brunori, Charging Point Operator Italy Business Strategy Manager, Enel, Italy

Regulatory challenges for the electricity markets in a renewable-based energy system: the EU new market design

(The Cloister Room)

Chair: Guido Bortoni, President CESI, Italy

Gianni Vittorio Armani, President Elettricità Futura, Italy

Derek Bunn, Professor of Decision Sciences, Management Science and Operations London Business School

Guido Bortoni, President CESI, Italy

Lucia Visconti Parisio, full Professor of Public Economics and Board member at the University of Milano-Bicocca, Italy

11.30 - 13.00 Concurrent Sessions (5-8)

5 Integration and management of the electricity grid

(The Cloister Room - Sala del Chiostro)

Chair: Iacopo Savelli, Postdoctoral researcher (RTDa) in Applied Economics at the GREEN

Timelines and delays in European grid expansion

Presenter: Damiano Alessi, WU (Vienna University of Economics and Business), Austria

Authors: Damiano Alessi, Kavita Surana; Behnam Zakeri

TSO-DSO Coordination and Market Power in Sequential Electricity and Ancillary Services Markets: Equilibrium Models Under Load and Renewable Generation Uncertainty

Presenter: Maria Teresa Vespucci, University of Bergamo, Italy

Authors: Maria Teresa Vespucci, Giovanni Micheli, Gianluigi Migliavacca, Dario Siface

The duck curve bites back: when flexible demand overloads the grid

Presenter: Laura Andolfi, SnT – University of Luxembourg, Luxembourg

Authors: Joachim Geske, Boris Ortega, Laura Andolfi, Rawan Akkouch

Unlocking the Grid: Institutionalizing Power System Impact Assessment for Integrated SOC-Electricity Infrastructure in South Korea

Presenter: Jaesung Choi, Korea Research Institute for Human Settlements (KRIHS), Korea

Author: Jaesung Choi

7 Special Session on Energy communities: case studies and future trends (The Fresco Hall - Sala degli Affreschi)

Chair: Nicola Sorrentino, University of Calabria, Italy

Fair reward allocations for energy communities: bridging the gap between game-theory and practical allocations

Presenter: Davide Poli, University of Pisa, Italy

Authors: Tommaso Ferrucci, Davide Fioriti, Davide Poli

Concentrated Vs Distributed Storage in collective self-consumption buildings

Presenter: Francesco Puddu, University of Cagliari, Italy

Authors: Emilio Ghiani, Davide Murgia, Federico Mattana, Francesco Puddu, Viola Gioi, Fabrizio Pilo

Value creation in Renewable Energy Communities increasing self consumption by operation management platform: a real life case

Presenter: Giovanni Brusco, Creta Energie Speciali, Italy

Authors: Daniele Menniti, Nicola Sorrentino, Giovanni Brusco

Microgrid configurations for energy communities: the Power Sharing Model

Presenter: Luigi Martirano, University La Sapienza -Rome

Author: Luigi Martirano

6 The future of nuclear in Europe (Room A)

Chair: Federico Santi, Professor, la Sapienza University of Rome, Italy

Redevelopment trajectories of nuclear sites. An European comparison

Presenter: Belinda Ravaz, HEIG-VD, Switzerland

Authors: Belinda Ravaz, Pierre-Henri Bombenger

Is Fusion Too Late? How Investors Value Its Role in a Decarbonized Europe

Presenter: Maximilian J. Blaschke, TUM School of Management, Germany

Authors: Sophia A. E. Spitzer, Katja Pelzer, Anton Bauer, Maximilian J. Blaschke

Prospective Analysis of Spatial and Economic Impacts of Small Modular Reactor Deployment in Switzerland

Presenter: Massimiliano Capezali, University of Applied Sciences and Arts Western Switzerland, Switzerland

Authors: Olivier Paltenghi, Pierre-Henri Bombenger

8 Pathways to Net-Zero in the Global Energy Transition (Room B)

Chair: Agatino Nicita, Consiglio Nazionale delle Ricerche (CNR), Institute of Advanced Technologies for Energy *Nicola Giordano* (ITAE), Italy

Evaluating net-zero pathways through a multi-criteria sustainability lens: trade-offs in emissions, economics, and energy security

Presenter: Adnan Shihab-Eldin, Oxford Institute for Energy Studies, UK

Author: Adnan Shihab-Eldin

A global view of energy security from dual use perspective: solar chargers, scintillators and unmanned platforms for medicine, nuclear and military security and space exploration

Presenter: Agnieszka Iwan, Military Institute of Engineer Technology, Wrocław, Poland

Authors: Agnieszka Iwan, Krzysztof A. Bogdanowicz, Witalis Pellowski

Navigating the Energy Transition pathways to net zero in Italy

Presenter: Vlad Duboviks, GE Vernova Consulting Services Europe, UK

Authors: Vlad Duboviks, Roberta Galli, Steve Pedder, Rafael Ledesma

The Potential Role of Alternative Fuels in Decarbonizing Hard-to-Abate Transport Sectors

Presenter: Valeria Di Cosmo, University of Torino, Italy

Authors: Alessio Vai, Matteo Nicoli, Daniele Mosso, Laura Savoldi, Valeria Di Cosmo

13.00 - 14.30 Lunch buffet

14.30 - 16.00 Dual Plenary Sessions

The gas role in a changing geopolitical context: natural gas, hydrogen, other renewable gases and CCUS

(The Cloister Room)

Chair: **Carlo Di Primio**, Managing Partner, Horus Green Energy Investment, AIEE Honorary President, Italy

Massimo Derchi, Chief Infrastructure Operations, Engineering & Construction Officer SNAM, Italy

Gaetano Iaquaniello, Vice-President of Technology and Business Development at KT – Kinetics Technology

Lapo Pistelli, Director Public Affairs, Eni, Italy

Adonis Yatchew, Professor of Economics University of Toronto, Canada – Vice President for Publications, IAEE – International Association for Energy Economics,

The EU Taxonomy Regulation, sustainable energies and ESG targets

(The Fresco Hall)

Chair: **Adnan Shihab-Eldin**, Research Associate at the Oxford Institute for Energy Studies

Roberta Galli, Executive – Enterprise Commercial Development, GE Vernova, and Federmanager Commission for Energy and Electricity System, Italy

Patrizia Marin, Chairman, Marco Polo Experience, Professor of International Relations IULM University, UAE

Tilemachos Mavrikis, CEO EMEA, Impact Alliance, Greece

Silvia Pariente David, Senior advisor and consultant on energy and climate change issues, France

16.00-17.30 Concurrent Sessions (9-12)

9 Integration and management of the electricity grid: some experiences *(The Cloister Room - Sala del Chiostro)*

Chair: Maria Teresa Vespucci, Professor, University of Bergamo, Italy

Decarbonizing The U.S. Grid: An Optimization-Based Study

Presenter: Aastha Bindra, Technical University of Munich, Germany
Authors: Aastha Bindra, Thushara Addanki, Thomas Hamacher

The Spatial Resolution of Green Electricity Claims: Insights on Locational Matching and Market Liquidity from Germany

Presenter: Hanna Scholta, Technical University of Munich, Germany
Authors: Hanna Scholta, Benedikt Lechl, Gero Sutmann

Incentive Regulation and Productivity Analysis of Ontario Electricity Distributors

Presenter: Adonis Yatchew, University of Toronto, Canada
Authors: Adonis Yatchew, Frederik Dufour, Michael Scafe

How has covid-19 affected the French electricity load curve?

Presenter: Younoussa Abdoulhazis Oumarou, Université de Pau et des pays de l'Adour, France
Authors: Camille Massie Gamard, Younoussa Abdoulhazis Oumarou

12 Exploring Sustainability Across Energy, Policy, and Environmental Systems *(Room B)*

Chair: Francesco Marghella, Research & Studies, Chief Transformation Office, ACEA, Italy

Toward sustainable practices in photovoltaic and agricultural greenhouse systems: an ecosystem services framework

Presenter: Ofir Rubin, Ben-Gurion University of the Negev, Israel
Authors: Aviv Steren, Yehuda Slater, Ofir Rubin, Aliza Fleischer, Iddo Kan

The role of board diversity on the cost of hydropower companies

Presenter: Samuel Schenk, ETH Zurich, Switzerland
Authors: Samuel Schenk, Massimo Filippini

Hydrogen Trade Prospects and Transport Modelling with TIMES-GEO Global Model

Presenter: Alessandro Chiodi, E4SMA Srl
Authors: Maurizio Gargiulo, Alessandro Chiodi, Tommaso Pillon

10 Global dynamics of the fossil fuel market *(Room A)*

Chair: Roberta Galli, Executive - Enterprise Commercial Development, GE Vernova, Italy

Evaluating the Impacts of the EU Methane Regulation on Natural Gas Imports

Presenter: Hendrik Diers, Institute of Energy Economics at the University of Cologne, Germany
Author: Hendrik Diers

The economics of carbon capture and storage: learnings from policymaking and investment analysis

Presenter: Thorsten Fischer, Saudi Aramco, Saudi Arabia
Author: Thorsten Fischer

Redrawing the Energy Map: A Maritime Data Perspective on Post-Ukraine War Petroleum Trade

Presenter: Haiying Jia, Norwegian School of Economics, Norway
Authors: Haiying Jia, Roar Adland

11 Energy poverty: a global challenge

(The Fresco Hall - Sala degli Affreschi)

Chair: Pierluigi Nichilo, Independent Researcher, Italy

Understanding Energy Poverty in the Global North: A Panel Data Investigation

Presenter: Emran Hakeem, Effat University, Saudi Arabia
Authors: Emran Hakeem, Mohammed Hakeem and Rozina Shaheen

Foreign Direct Investment and Energy Poverty in Africa: The Role of International Partnerships

Presenter: Emna Kanzari, University of Palermo, Italy
Authors: Emna Kanzari, Stefano Fricano, Gioacchino Fazio

The impact of China's outward investment on energy poverty in Africa

Presenter: Yishuang Liu, Wuhan University, China
Authors: Yishuang Liu, Dong Hanmin

How has covid-19 influenced the dynamics of fuel poverty in mainland France?

Presenter: Corinne Chaton, CREST, FIME, France
Authors: Corinne Chaton, Thierry Kamionka, Mila Marsot

18.00 - 20.00 Gala dinner



November 21, 2025 - h 19.00-21.00

Gala dinner at Al Gladiatore

A very special moment in the romantic atmosphere of a historical place at 5 minutes walk from the venue.
(Piazza del Colosseo n. 5)

The restaurant Al Gladiatore is located in the center of Rome and offers a romantic and evocative view of the Colosseum. The atmosphere inside is intimate yet familiar, typical of old-fashioned taverns.

At Al Gladiatore, you'll embark on a sensory journey through the tastes and flavors of times gone by, enhanced by the finest Italian wines.

Saturday, November 22

09.00 - 10.30 Concurrent Sessions (13-16)

13 Special Session: Teaching Energy Economics and Policy – Reflections and a New Open-Access Textbook (Room A)

Chair: Massimo Filippini, ETH Zürich and Università della Svizzera Italiana, Switzerland

The goal of this special session is to initiate a discussion on best practices in teaching energy economics and policy, while also showcasing a new classroom resource. A central focus will be the recently published open-access textbook “An Introduction to Energy Economics and Policy” by Massimo Filippini and Suchita Srinivasan, published by Cambridge University Press. The book offers a structured, accessible introduction to key concepts in energy economics, combining theory with real-world case studies. In this session, Professor Filippini will present the objectives, content, structure, and pedagogical innovations of the book, highlighting how it can be used in both undergraduate and graduate teaching.

speakers:

Massimo Filippini, Professor ETH Zürich and Università della Svizzera Italiana, Switzerland

Carlo Andrea Bollino, Professor of Economics at the University of Perugia, Professor of Energy Economics at LUISS University, Rome and Visiting Fellow at KAPSARC

Valeria Di Cosmo, Professor at the Department of Economics and Statistics “Cognetti de Martiis”, University of Turin, Italy

16 An overview on energy access (Room B)

Chair: Carlo Di Primio, Honorary President AIEE, Italy

Sustainable welfare economics – an example of West Africa

Presenter: Holger Schlör, Forschungszentrum Jülich, Jülich Systems Analysis (ICE-2), Germany

Authors: Holger Schlör, Sandra Venhagus

Identifying Flexibility in Autonomous Municipal Energy Systems Using Modeling to Generate Alternatives

Presenter: Lovindu Wijesinghe, Forschungszentrum Jülich GmbH, Institute of Climate and Energy Systems (ICE), Jülich Systems Analysis (ICE-2), Germany

Authors: Lovindu Wijesinghe, Jann Michael Weinand, Noor Titan Putri Hartono, Detlef Stolten, Jochen Linßen

14 How Industry Is Moving Toward Decarbonisation

(The Fresco Hall - Sala degli Affreschi)

Chair: Emanuele Piccinno, Energy Consultant AIEE, Italy

Digital Transformation and Industrial Sustainability

Presenter: Filip Mandys, University of Cambridge, UK

Authors: Shivani Taneja, Filip Mandys

Selective Target Reporting? Assessing Corporate Scope 2 Emission Disclosure

Presenter: Johannes Bösch, TUM School of Management, Germany

Author: Johannes Bösch

Too Complex to Control? How Firms Navigate Scope 3 Governance under Strategic and Institutional Uncertainty

Presenter: Victoria Fohrer, Technical University of Munich, Germany

Author: Victoria Fohrer

Sustainability of the global balance between supply and demand for metals in the long term – accounting for secondary supply

Presenter: Maylis Peyret, Université Paris-Dauphine-PSL, France

Authors: Maylis Peyret, Frédéric Gonand

15 Energy Infrastructure and Market Integration

(The Cloister Room - Sala del Chiostro)

Chair: Mario Iannotti, Energy and Environmental Senior Policy Expert at Sogesid and Italian Agency for Development Cooperation (AICS).

The Financial Transmission Right trilemma in the European cross-border long-term market: flow-based market coupling, revenue adequacy and economic efficiency

Presenter: Diyun Huang, University of Leuven, Belgium

Authors: Diyun Huang, Geert Deconinck

Peaks and Lulls in Sector Integrated Energy Systems – A Risk for Security of Supply?

Presenter: Thomas Schöb, Forschungszentrum Jülich GmbH, Institute of Climate and Energy Systems, Jülich Systems Analysis, Germany

Authors: Thomas Schöb, Theresa Klütz, Toni Busch, Jochen Linssen, Jann Michael Weinand

Network infrastructures and day-ahead volatility: a case from the Italian market

Presenter: Marina Bertolini, University of Padova, Italy

Authors: Marina Bertolini, Pierdomenico Dutillo; Francesco Lisi

How does China respond to the Carbon Border Adjustment Mechanism? An approach of global trade analysis

Presenter: Zhe-Yi Chen, Beijing Institute of Technology, China

Authors: Zhe-Yi Chen, Lu-Tao Zhao

10.30 - 12.00 Concurrent Sessions (17-20)

17 The challenges posed by renewable energy technologies (I) (Room A)

Chair: Silvia Orchi, Senior Researcher, Sustainable Mobility and Transport Laboratory (TERIN – DEC – MOST), ENEA, Italy

The fate of aging hydropower plants: reinvestment or upgrading?

Presenter: Anna Carozzani, University of Padova, Italy

Authors: Anna Carozzani, Chiara D'Alpaos, Verena Hagspiel-Janssen, Michele Moretto

Techno-economic analysis of simple production and consumption system for hydro power plants: a case study

Presenter: Andrea Paolacci, Sapienza – Università di Roma, Italy

Authors: Andrea Paolacci, Maria Carmen Falvo, Flavio Andreoli

19 Rethinking Fuels for a Low-Carbon Future

Cancelled

18 Energy efficiency: how systems respond to energy or environmental factors (The Cloister Room - Sala del Chiostro)

Chair: Francesco Castellani, Sapienza University of Rome

Does neighbourhood matter? The impact of proximity to (dis) amenities on home price

Presenter: Thierry Kamionka, CNRS and CREST, France

Author: Thierry Kamionka

Charging smart: evaluating emission and costs of SAEV charging strategies in a European power system

Presenter: Sophie Charlotte Westphal, Technical University Munich, Germany

Author: Sophie Charlotte Westphal

Efficiency and decarbonization through electrification in non-residential civil sector: challenges, potential and main obstacles

Presenter: Francesco Castellani

Authors: Francesco Castellani, Maria Carmen Falvo, Federico Santi

20 Elements for the future: bioeconomy and CRM

(The Fresco Hall - Sala degli Affreschi)

Chair: Valeria Di Cosmo, University of Torino, Italy

Equilibrium Power Market Investments – Investigating equilibria of capacity payments

Presenter: Amir Ashour Novirdoust, Institute of Energy Economics at the University of Cologne (EWI), Germany

Authors: Amir Ashour Novirdoust, Hendrik Diers, Pia Willers

Levelized cost of electricity: can its accuracy be improved?

Presenter: Giuseppe Dell'Olio, GSE SpA, Italy

Author: Giuseppe Dell'Olio

Impact of Coordinated Infrastructure Development toward Climate Neutrality under EU Regulations from an Energy System Perspective

Presenter: Peiwen Zhang, Institute of Energy Economics and Rational Energy Use, University of Stuttgart, Germany

Authors: Peiwen Zhang, Markus Blesl

Tariff structure for distribution networks: a case study for European prosumers and stakeholders

Presenter: Cédric Clastres, University Grenoble-Alpes, France

Authors: Cédric Clastres, Alexandre de Cannière, Kriti Baruah

12.00-13.30 Concurrent Sessions (21-24)

21 The challenges posed by renewable energy technologies (II) (Room A)

Chair: Paolo Colbertaldo, Professor, Politecnico di Milano, Italy

ETHOS.TISED: A Python Package for Temporal Downscaling of Solar Irradiance

Presenter: Olalekan Omoyele, Forschungszentrum Jülich, Germany

Authors: Olalekan Omoyele, Titan Hartono, Jann Michael Weinand, and Jochen Linßen

Exploring the Role of Offshore Wind in Italy's 2050 Energy Mix: a Scenario-based Analysis using EnergyScope TDs

Presenter: Marco Cappellari, Università degli Studi di Padova, Italy

Authors: Marco Cappellari, Giovanni Cappena, Arturo Lorenzoni

The impact of distributed power generation on storage and infrastructure in net-zero scenario

Presenter: Paolo Colbertaldo, Politecnico di Milano, Italy

Authors: Federico Parolin, Andrea Capitali, Stefano Campanari, Paolo Colbertaldo

24 Energy, electrical systems and energy planning

(The Cloister Room - Sala del Chiostro)

Chair: Antonio Geracitano, Adjunct Professor, Tor Vergata University of Rome, Italy

Measuring Marginality: the Evolution of Competitiveness in the Italian Electricity Market

Presenter: Lucia Visconti Parisio, Università di Milano – Bicocca, Italy

Authors: Lucia Visconti Parisio, Alessio Lovarelli

Flexibility as a Driver of Structural Decentralization: A Multi-Regional Power System Model

Presenter: Théotime Coudray, Université de Montpellier, France

Authors: Théotime Coudray, Sandrine Michel

Modeling to Generate near-Pareto-optimal Alternatives (MGPA) for long-term energy planning

Presenter: Matteo Nicoli, University of Turin, Italy

Authors: Matteo Nicoli, Valeria Di Cosmo, Laura Savoldi

An assessment of balancing resources in the Italian power system

Presenter: Silvia Canavese, Ricerca sul Sistema Energetico – RSE, Milan, Italy

Authors: Silvia Canavese, Antonio Gatti

22 The interdisciplinary nature of energy (Room B)

Chair: Luigi Calcara, Professor, Sapienza University of Rome

Semantic data exchange in BIM to BEM workflows using IFC and SQL-based mapping

Presenter: Federico Rossi, University of Padua, Italy

Authors: Federico Rossi, Carlo Zanchetta

Narratives and the Interdisciplinary Nature of Energy

Presenter: Adonis Yatchew, University of Toronto, Canada

Author: Adonis Yatchew

Assessing the Economic and Sectoral Impacts of Carbon Capture and Storage Integration in KGEMM

Presenter: Heyran Aliyeva KAPSARC

Authors: Fakhri Hasanov, Naser Odeh, Carlo Andrea Bollino, Heyran Aliyeva, and Majed Almozaini

Evaluation of PDIV in Low-GWP Gases

Presenter: Federico Di Palma, Sapienza University of Rome, Italy

Authors: Federico Di Palma, Mohtana Aljasseem, Alessio Rufa, Rosario Cammarata

23 Inclusive Energy Transitions and Local Energy Challenges in a Global Context

(The Fresco Hall - Sala degli Affreschi)

Chair: Cristina Cornaro, Full Professor Tor Vergata University of Rome

Local energy communities for an inclusive energy transition

Presenter: Marco Kunz, Lucerne University of Applied Sciences and Arts, Switzerland

Authors: Marco Kunz, Joëlle Clot, Corinne Schwaller, Oliver Woll

Rule-based ac energy exchange for urban prosumers to enhance local energy performance

Presenter: Saeed Khorrami, Sapienza University of Rome, Italy

Authors: Saeed Khorrami, Maria Carmen Falvo, Pablo García Fernández, Ángel Navarro Rodríguez, Carlos Gómez-Aleixandre Tiemblo, Mahmoud Rashad Ahmed

Energy demand for desalinated water in Saudi Arabia

Presenter: Muhammad Javid, KAPSARC, Saudi Arabia

Author: Muhammad Javid

Energy and Transport poverty in the European Union and UK: A bibliometric and systematic literature review. A non “autobiography of no energy emancipated households in UE and in his Islands”

Presenter: Gabriel Navarro Tilloca, IMT Lucca and University of Florence, Italy

Authors: Gabriel Navarro Tilloca, Giacomo Marzi and Angelo Facchini

13.30 - 14.30 Lunch buffet

Conference Secretariat

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