1st AIEE Energy Symposium

Current and Future Challenges to Energy Security

Milan, November 30 - December 2, 2016
University Bicocca

www.aieeconference2016milano.eu
Dear Energy Colleague,

The AIEE - Italian Association of Energy Economists (Italian affiliate of the IAEE - The International Association for Energy Economics) is organizing this international conference in cooperation with the Bicocca University of Milan to bring together energy experts engaged in academic, business, government, international organizations for an exchange of ideas and experiences on the present and future landscape of energy security.

As Europe strives to overcome the economic crisis, energy stands out both as a conditioning factor and as an opportunity. The energy situation is evolving in Europe as well as in the rest of the world, where new actors, the emerging economies, are taking the leading role. Political developments in several areas of the globe (North Africa and Middle East, the Caspian region, ASECAN countries) are reshaping the geopolitical situation, generating some worries about the security of supply in the EU countries. The concept of energy security is undergoing a rapid transformation. In the past, geopolitics and the supply of oil and gas were the dominant factors determining energy security. Today, a broader and more complex spectrum of elements are interacting to both stabilize and threaten energy security.

The availability of energy sources, when we consider both fossil fuels and renewables, is increasing. In particular, a major source of change is the strong growth in the production and integration of renewable and distributed energy, which offers opportunities to diversify the energy mix and thus improve energy security by reducing physical reliance and price exposure to only a few sources and countries. At the same time, this paradigm of a new energy system has strong implications both on petroleum-producing countries and companies, with knock-on effects on geo-economic balance of powers and energy markets and on the security and reliability of the transmission and distribution networks. The new challenges of the digital revolution that on one hand allows opportunities to improve efficiency, to have lower costs but on the other hand raises a whole new set of challenges and creates vulnerabilities we have never seen before so that energy is being viewed as a key part of national security. While in the past the supply side was the dominant factor in energy security, with the critical element being the possibility of sourcing the products to produce electricity and provide mobility, now the energy security balance is changing. Supply is as important and as vulnerable as is the transmission and distribution of energy.

The purpose of this conference is to provide a fresh look at the forces driving this transformation and at some of their effects. Many of them are different from anything we have seen in the past.

This conference will try to explore new and existing energy trends, challenges and creative solutions for the energy security, the availability of new technologies, the emergence of new market conditions and of new market operators.

No better stage can be imagined for this debate than Milan, the crossroad of political, economic and cultural activities.

Carlo Andrea Bollino, General Conference Chair
Carlo Di Primio, Organization Committee Chair

### Organization

**AIEE - ITALIAN ASSOCIATION OF ENERGY ECONOMISTS**

**President AIEE, Italy**

**Carlo Andrea Bollino (GENERAL CONFERENCE CHAIR)**

**Vice President, AIEE, Italy**

**ANKA SERBU (ORGANIZATION AND COORDINATION)**

**External Relations & Communication, AIEE, Italy**

**UNIVERSITY BICOCCA**

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**Professor, Bicocca University, Italy**

**SILVANA STEFANI, (PROGRAMME COMMITTEE CHAIR)**

**Professor, Bicocca University, Italy**

### Programme Committee

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Simona Bigerna, University of Perugia, Italy; Ugo Farinelli, AIEE, Italy; Vittorio D’Ermo, AIEE, Italy; Antonella Donia, AIEE-Milano, Italy; Francesco Marghella, AIEE, Italy; Alberto Pincherle, AIEE, Italy; Paolo Polinori, University of Perugia, Italy.

### Scientific Committee

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### Conference Secretariat

Antonella Donia, Daisy de Selliers (CONFERENCE PROGRAMME)

Anna Paolo Calapaj, Adelaide Calapaj (SECRETARIAT)
Wednesday, November 30

16.00-18.30    Registration

16.00-17.00    Opening Welcome Address (Building U6 - Aula Magna - ground floor)

Gurkan Kumbaroglu, IAEE President
Carlo Andrea Bollino, AIEE President
Cristina Messa, President of Bicocca University
Lucia Visconti Parisio, Head of the Department of Economics, University Bicocca
Marco Granelli, Councillor for Mobility and Environment of the Municipality of Milan
Alberto Meomartini, President of Innovhub-Sperimental Stations for Industry

17.00-18.30    Welcome Cocktail

Thursday, December 1st

08.30 – 17.00    Registration

08.30 - 10.30    Coffee Bar (Building U6 - floor -1)

09.00-10.30    Concurrent Sessions (1-4)

01 The impact of oil price fluctuation - Building U6 - Room Rodolfi - 4th floor
Chair: Alberto Pincherle, AIEE, Italy

02 Promoting or imposing energy efficiency - Building U7 - Room Pagani - 3rd floor
Chair: Carlo Mari, University of Pescara, Italy

03 Energy roadmap to 2050 - Building U6 - Room 1F - ground floor
Chair: G.B. Zorzoli, AIEE, Italy

04 The challenges of electricity market design - Building U7 - Room 12 - ground floor
Chair: Carlo Andrea Bollino, AIEE and University of Perugia, Italy

10.30-11.30    Dual Plenary Sessions

Energy security of supply and market developments - (Building U6 - Room 1F - ground floor)
Chair: Giuseppe Gatti, President Energia Concorrente

Regulation of energy markets - (Building U6 - Room Rodolfi - 4th floor)
Chair: Alessandro Ortis, President Stati Generali dell’Efficienza Energetica

11.30-13.00    Concurrent Sessions (5-8)

05 The gas market: new perspectives? (Part I) - Building U6 - Room Rodolfi - 4th floor
Chair: Georg Erdmann, Institute for Energy Technology, Berlin University of Technology, German

06 Energy Efficiency in buildings - Building U6 - Room 1F - ground floor
Chair: Antonio Geracitano, EOS Consulting S.p.A

07 Energy supply & security - Building U7 - Room 12 - ground floor
Chair: John Roberts, Natural Gas World, UK

08 Power markets regulation - Building U7 - Room Pagani - 3rd floor
Chair: Fatma Çiğdem Çelik, Okan University, Department of Economics, Turkey

13.00-14.00    Lunch buffet (Building U6 - floor -1)

14.00-15.30    Concurrent Sessions (9-12)

09 The European gas market evolution - Building U6 - Room Rodolfi - 4th floor
Chair: Vittorio D’Ermo, AIEE, Italy

10 Energy and Industrial Competitiveness - Building U6 - Room 1F - ground floor
Chair: Agime Gerbeti, LUMSA University, Italy

11 Energy supply & security: some experiences - Building U7 - Room 12 - ground floor
Chair: Angelica Gianfreda, University Bicocca, Italy

12 Regulation of energy markets: some experiences - Building U7 - Room Pagani - 3rd floor
Chair: Ionut Purica, Advisory Center for Energy and Environment and Agency for Nuclear Energy and Radioactive Waste
Friday, December 2

08.30 - 17.00 Registration

08.30 - 10.30 Coffee Bar (Building U6 - floor -1)

09.00 - 10.30 Concurrent Sessions (17-20)

17 Strategic contribution of energy storage to energy security - Building U6 - Room 1F - ground floor
Chair: Arturo Lorenzoni, University of Padua, Italy

18 Behavioural energy economics - Building U6 - Room 1B - ground floor
Chair: Sonnenschein Jonas, IIIEE, Lund University

19 Environmental policy and security: an overview - Building U6 - Room Rodolfi - 4th floor
Chair: Federico Geracitano, University of Macerata

20 Innovation in power markets - Building U7 - Room Pagani - 3rd floor
Chair: Silvana Stefani, University Bicocca, Italy

10.30 - 11.30 Dual Plenary Sessions

Energy challenges in the industrial sectors: the transition to a low-carbon economy
(Building U6 - Room 1F - ground floor)
Chair: Pippo Ranci, Professor of Economic Policy at the Università Cattolica, Italy

Europe Roadmap to 2050 and the future strategies of the energy industry
(Building U6 - Room 1B - ground floor)
Chair: Felice Egidi, Head of European Public Affairs, Enel

11.30 - 13.00 Concurrent Sessions (21-24)

21 Technology development - grid management - Building U6 - Room 1F - ground floor
Chair: Francesco Marghella, AIEE, Italy

22 KAPSARC Special Session - Building U6 - Room Rodolfi - 4th floor
Discussion of the Special Issue of the Energy Journal: “Renewables and Diversification in Heavily Energy Subsidized Economies”

23 Climate policy and emission trading - Building U6 - Room 1B - ground floor
Chair: Antonio Geracitano, EOS Consulting S.p.A.

24 Policies for RES technologies - Building U7 - Room Pagani - 3rd floor
Chair: Lucia Visconti Parisio, University of Milano Bicocca, Faculty of Economics, Italy

13.00 - 14.00 Lunch and "Student Best Paper Award Ceremony" Building U6 - floor -1)

14.00 - 15.00 Plenary Session
European perspectives in the global energy context - (Building U6 - Room 1B - ground floor)
Chair: Carlo Andrea Bollino, President AIEE

15.00 - 16.30 Concurrent Sessions (25-26)

25 The future of transport - Building U6 - Room 1F - ground floor
Chair: Simone Casadei, INNOVHUB Stazioni Sperimentali per l’Industria

26 Student Session (Student Best Paper Award) - Building U6 - Room 1B - ground floor
Chair: Alessandro Sapio, University of Naples Parthenope
Thursday, December 1st

09.00-10.30 Concurrent Sessions (1-4)

1. The impact of oil price fluctuation
   Chair: Alberto Pincherle, AIEE, Italy
   Macroeconomic and Financial Effects of Oil Price Shocks: Evidence for the Euro Area
   Presenter: Claudio Morana, University of Milano Bicocca, Italy
   Author: Claudio Morana
   Reserves at Risk: Planning with Deep Uncertainty and High Complexity
   Presenter: Umberto Perna, Eni S.p.A. & CNR-ISC, Italy
   Authors: Umberto Perna, Vanessa Ulivieri
   A Model Proposal to Estimate The Effect Of Oil Price On Renewable Energy Consumption, Case Study: Europe
   Presenter: Mazzarano Matteo, University of Bologna, Italy
   Authors: Mazzarano Matteo, Amirhossein Fattahi
   The effects of structural breaks on the long run level of oil and oil products. Evidence from the last two oil price crashes
   Presenter: Rodríguez-Monroy Carlos, Universidad Politécnica de Madrid, Spain
   Authors: Rodríguez-Monroy Carlos, Pablo A. Cansado-Braço
   The effects of exogenous oil supply shocks on the economic growth of selected Mediterranean countries
   Presenter: Matteo Manera, University of Milan - Bicocca, Italy
   Authors: Marzio Galeotti, Matteo Manera , Andrea Bastianin

2. Promoting or imposing energy efficiency
   Chair: Carlo Mari, University of Pescara, Italy
   Boundedly rational consumers, energy and investment literacy, and the display of information on household appliances
   Presenter: Niklanth Kumar, ETH Zurich, Switzerland
   Authors: Blasch Julia E., Massimo Filippini, Niklanth Kumar
   Examining the energy rebound effect in South Africa within a BRICS countries context
   Presenter: Inglesi-Lotz Roula, Department of Economics, University of Pretoria, South Africa
   Author: Inglesi-Lotz Roula
   Economic and sectoral impacts of energy efficiency targets: a general equilibrium approach for Portugal
   Presenter: Carla Teotónio, Universidade de Aveiro, Portugal
   Authors: Teotónio Carla, Miguel Rodriguez-Mendez, Peter Roebeling, Patricia Fortes da Silva

3. Energy roadmap to 2050
   Chair: G.B. Zorzoli, AIEE, Italy
   Economic Feasibility of Wind Energy Participation in Secondary Reserves Markets
   Presenter: Thompson Andrew, Vedecom/Université Paris-Saclay, France
   Authors: Thompson Andrew
   Allocation of renewable generation from an energy portfolio
   Presenter: Scalia Antonio, CNR-ISC -Istituto Sistemi Complessi, Italy
   Authors: Scalia Antonio, Angelo Facchini, Umberto Perna
   The Phase out of Coal in Britain and Germany: A Comparative Analysis of Drivers and Barriers
   Presenter: Ball Christopher, Forschungszentrum Jülich IEK-STE, Germany
   Author: Paul Kunz, Christopher Ball

10.30-11.30 Dual Plenary Sessions

Regulation of energy markets
Chair: Alessandro Ortis, President Stati Generali dell’Efficienza Energetica (The States General of Energy Efficiency)

Clara Poletti, Director of the Regulatory Department of the Italian Regulatory Authority for Electricity, Gas and Water Services

Jean-Michel Giachant, Director of the Florence School of Regulation and Holder of the Loyola de Palacio Chair at the European University Institute

Georg Erdmann, Professor for Energy Systems at the Institute for Energy Technology, Berlin University of Technology

Energy security of supply and market developments
Chair: Giuseppe Gatti, President Energia Concorrente

Kostas Andriosopoulos, Executive Director, Research Centre for Energy Management (RCEM)

Giorgio Crugnola, RN Manager, FZSONICK

Felice Egidì, Senior Advisor, Assoelettrica

Chicco Testa, President Sorgenia

11.30-13.00 Concurrent Sessions (5-8)

5. The gas market: new perspectives? (Part I)
   Chair: Georg Erdmann, Institute for Energy Technology, Berlin University of Technology, Germany
   Hub-Based Gas Sourcing for Market Liquidity and Continuity of Supply
   Presenter: Cuypers Chris, Commission for Electricity and Gas Regulation (CREG), Belgium
   Authors: Cuypers Chris, Andreas Tirez
   Causes and consequences of boom-bust cycles in natural gas production assets investments
   Presenter: Joël Enderlin, ENGIE, Strategy Division, Center of Expertise in Economic and Modeling Studies, France
   Authors: Enderlin Joël, Benoît Dal Ferro
   Investigating price determinant factors in European natural gas long-term contract
   Presenter: Hanee Ryu, Seoul National University, Korea
   Authors: Ryu Hanee, Hyou Cho, Yeonbae Kim
6 Energy Efficiency in buildings
Chair: Antonio Geraetano, EOS Consulting S.p.A.
Some like it hot: An experiment on comfort expectations and energy retrofit decisions
Presenter: Reinhard Madlener, RWTH Aachen University, Germany
Authors: Reinhard Madlener, Veronica Galassi
Global economic potential from moderate and deep retrofit of building envelopes in residential and services sectors from an energy system perspective
Presenter: Cristian Hernán Cabrera Pérez, Technical University of Denmark,
Authors: Cabrera Cristian, Ksenia Petrichenko, Oleandr Balyk, Jay Gregg Sterling
A Structural Analysis of the Direct and Indirect Rebound Effects in Residential Heating
Presenter: Cécile Hediger, University of Neuchâtel, Switzerland
Authors: Hediger Cécile, Mehdi Farsi, Sylvain Weber
Evidence, drivers and sources of distortions in the distribution of building energy ratings prior to and after energy efficient retrofitting
Presenter: Matthew Collins, Economic and Social Research Institute, Ireland
Authors: Collins Matthew, John Curtis
Modular advanced monitoring and control system for increasing energy efficiency in existing buildings
Presenter: Bogdan Onose, ICPE SA – Energy Division, Romania
Author: Bogdan Onose

13.00-14.00 Lunch

14.00-15.30 Concurrent Sessions (9-12)

9 The European gas market evolution
Chair: Silvia Pariente-David, Center for Mediterranean Integration, France
A natural Gas Trading Platform for Japan
Presenter: Hashimoto Satoru, Teikyo University, Japan
Author: Hashimoto Satoru, Andrew Kleit
Russian LNG: competitiveness in the European natural gas market, the case of Italy
Presenter: Irina Mironova, NERPO Research Center, European University at Saint Petersburg, Russian Federation
Author: Mironova Irina
The Economics of Natural Gas Storages in North Western European Markets
Presenter: Chi-Kong Chyong, EPRG, University of Cambridge, U.K
Authors: Chi-Kong Chyong, David Reiner

10 Energy and Industrial Competitiveness
Chair: Agime Gerbei, LUMSA University, Italy
Natural gas: Renewables supporter or opponent
Presenter: Valeria Palmisano, Edison, Italy
Author: Palmisano Valeria
Economic impact of environmental and energy policies in Italy
Presenter: Cristina Brandimarte, ISTAT, Italy
Author: Cristina Brandimarte
The fossil fuel subsidies to the energy sector in Italy
Presenter: Mario Iannotti, Italian Ministry of Environment, Land & Sea – Directorate-General Sustainable Development and Relations with the EU and International Organizations – A.T. Sogesid
Author: Mario Iannotti
The cost and value of energy storage systems
Presenter: Manfred Weissbachser, University of Malta, Malta
Author: Weissbachser Manfred
Legal issues on renewable incentives in Italy
Presenter: Daria Capotorto, Agnoli e Giugiuldi Law firm
Author: Daria Capotorto

7 Energy supply & security - Building U7 - Room 12 - ground floor
Chair: John Roberts, Natural Gas World, UK
Presenter: Irie Kazutomo, Asia Pacific Energy Research Centre, the Institute of Energy Economics, Japan
Author: Irie Kazutomo
Outsourcing Land in Search for Energy Security: Still a Controversial Matter
Presenter: Rachel Ravagnani, State University of Campinas, Brasil
Authors: Rachel Ravagnani, Carlos Augusto Matuguma, Luis Renato Vedovato
Impacts of Czech brown coal mines enlargement: assessment by energy model TIMES
Presenter: Rečka Lukáš, Charles University Environment Center, Czech Republic
Author: Rečka Lukáš, Milan Ščasný

8 Power markets regulation
Chair: Fatma Çiğdem Çelik, Okan University, Department of Economics, Turkey
Is larger always better? Economics of power market integration
Presenter: Philipp Dees, Friedrich-Alexander-Universität Erlangen-Nürnberg, Institute of Economics, Germany
Authors: Philipp Dees
Demand participation in ancillary service markets
Presenter: Elena Fumagalli, Politecnico di Milano, Italy
Authors: Elena Fumagalli, Bastian Westbrook
The new Italian capacity remuneration mechanism. A deterministic modeling and simulation approach
Presenter: Giorgio Perico, REF-E Economics Engineering Energy Environment, Italy
Authors: Dalena Michele, Virginia Canazza, Giorgio Perico
Optimal operation of power distribution networks with renewable generation and storage devices
Presenter: Vespucci Maria Teresa, University of Bergamo
Authors: Vespucci M.T., Diana Moneta, Paolo Pisciotta, Giacomo Viganò

11 Energy supply & security: some experiences
Chair: Angelica Gianfreda, University Bicocca, Italy
Energy export strategies of the central Asian Caspian region
Presenter: Bakdolotov Aidyn, National Laboratory Astana, Kazakhstan
Authors: Bakdolotov Aidyn, Rocco De Miglio, Yerbol Akhmetbekov, Kanat Baigarin
The evolving international gas market and energy security in Nigeria: regulatory and policy issues
Presenter: Tade Oyewummi, Centre for Climate Change, Energy and Environmental Law, UEF Law School, Finland
Author: Oyewummi Tade
Rebel attacks against energy infrastructure and electoral contestation: a case study of Colombia
Presenter: Rebecca Lordan-Perret, University of Chicago and The Paul Scherrter Institute, USA
Author: Lordan-Perret Rebecca, Austin Wright, Peter Burgherr, Matteo Spada, Robert Rosner
Japan’s energy policy
Presenter: Zhuxiang Yang, The University of Tokyo, Japan
Author: Yang Zhuxiang

12 Regulation of energy markets: some experiences
Chair: Ionut Purica, Advisory Center for Energy and Environment and Agency for Nuclear Energy and Radioactive Waste
Strategies for Energy Investments: Is There a Case of Foreign Country Bias? Case of Switzerland
Presenter: Yuliya Karneyeva, University of St. Gallen, Switzerland
Author: Yuliya Karneyeva
The Nordic/Baltic Spot Electric Power System Price: Nonlinear Error-Shock Analysis
Presenter: Per Bjarte Solibakke, NTNU Faculty of Economics, Norway
Author: Solibakke Per Bjarte
Enabling Demand Response in Poland: Understanding the major factors that impact the uptake of demand response
Presenter: Katarzyna Ewa Rollett, Leuphana University Lüneburg, Germany
Author: Katarzyna Ewa Rollett
System Risk and Mark up in fossil production
Presenter: Silvana Stefani, University Bicocca, Italy
Authors: Paolo Falbo, Daniele Felletti, Silvana Stefani
15.30-17.00 Concurrent Sessions (13-16)

13 The gas market: new perspectives? (Part II)
   Chair: Vittorio D’Ermo, AIEE, Italy
   Export of Russian natural gas to Europe
   Presenter: Golombek Rolf, Frisch Centre, Norway
   Author: Rolf Golombek, Arild Moe, Knut Einar Rosendahl, Hilde Hallre Le Tissier
   Natural gas: Renewables supporter or opponent
   Presenter: Vlahakis Aryestis, Center for Economics Research ETH Zurich, Switzerland
   Author: Vlahakis Aryestis
   Availability of gas in the European Union in a dynamic geopolitical and commercial context
   Presenter: Alexandru Maxim, Alexandru Ioan Cuza University of Iaşi, CERNESIM Environmental Research Center, Romania
   Author: Maxim Alexandru

14 Sectoral approach to energy efficiency in industry
   Chair: Paolo Gentili, PriceWaterhouseCoopers, Italy
   Measuring the efficiency of energy-intensive industries across 23 European countries
   Presenter: Georgia Makridou, ESCP Europe Business School, U.K.
   Author: Makridou Georgia, Kostas Andriosopoulos, Michael Dounopoulos, Constantin Zopounidis
   Industry level production functions and energy use within a growth framework
   Presenter: Maria del Pablo-Romero, University of Seville, Spain
   Author: Antonio Sánchez-Braza, Maria del Pablo-Romero
   Energy efficiency trends in EU industrial sectors
   Presenter: Francesco Marghella, AIEE, Italy
   Author: Marghella Francesco
   Design and optimization the horizontal axis wind turbine blades (HAWTS) using blade element momentum theory BEM
   Presenter: Younes El khchine, Engineering Sciences Laboratory, Polydisciplinary Faculty of Taza, Sidi Mohamed Ben Abdellah University, BP 1223, Taza, Morocco
   Author: Mohammed Sriti, Younes El khchine

15 The challenges of climate change
   Chair: Agime Gerbeti, LUMSA University
   Why do we prefer below 2 degree warming world and how do we act in the different conditions?
   Presenter: Mori Shunsuke, Tokyo University of Science, Japan
   Author: Mori Shunsuke
   Pollutant Abatement Investment under Technological Uncertainty
   Presenter: Motoh Tsujimura, Doshisha University, Japan
   Authors: Motoh Tsujimura, Akira Maeda
   Overlapping policies and clean technology adoption under endogenous uncertainty
   Presenter: Boffa Federico, University of Bolzano, Italy
   Authors: Boffa Federico, Stefano Clò, Alessio D’Amato
   Coping with the collapse: a stock-flow consistent monetary macrodynamics of global warming
   Presenter: Emmanuel Bovari, Agence Française de Développement - Université Paris 1 - Panthéon-Sorbonne, Centre d’Economie de la Sorbonne, France
   Authors: Giraud Gaël, Florent Mclsaac, Emmanuel Bovari, Ekaterina Zatsipina

16 The electricity market: an overview for the future
   Chair: Alberto Pincherle, AIEE, Italy
   Technical due diligence analysis of the efficient system for users (SEU)
   Presenter: Antonio Geracitano, EOS Consulting S.p.A., Italy
   Author: Geracitano Antonio, Emanuele Riccobene
   Assessing public policy support to wind power generation in reunion island
   Presenter: Vincent Deodat, Center of Economics and Management of the Indian Ocean (CEMOI), University of Reunion, France
   Authors: Deodat Vincent, Fabrizio Carlevaro
   Vertical integration and retail tariff design in electricity markets
   Presenter: Andreas Knaut, Institute of Energy Economics, University of Cologne, Germany
   Author: Knaut Andreas
   Future of Electricity. How innovation & disruption will reshape the power sector
   Presenter: Fereidoon P. Sioshansi, Menlo Energy Economics, USA
   Author: Fereidoon P. Sioshansi

ACCOMPANYING PERSONS - "LAKE COMO TOUR" - December 1 st

We are organizing a "LAKE COMO TOUR", a One-day excursion on one of the most exclusive tourist locations. Lake Como, a beautiful and romantic tourist resort that every year attracts visitors from all over the world.
Visit COMO and SHOPPING TOUR.

PROGRAM

H 09:00 - Start from Milan with minivan/minibus private service (meeting point University Bicocca)
H 10:30 - Arrive in BELLLAGIO, visit of the town, time for shopping
H 12:00 - Ferry boat to CADENABBIA. Lunch in TREMEZZINA area (not included in the cost)
H 14:00 - Visit of VILLA BALBIANELLO (15’ walking from LENNO)
H 16:00 - Arrive in COMO, tour of city center and time for shopping

Cost: Euro 65 per person - Minimum partecipants required: 6-7
contact the conference secretariat: assaiee@aiee.it
### 09.00-10.30 Concurrent Sessions (17-20)

#### 17 Strategic contribution of energy storage to energy security
*Chair: Arturo Lorenzoni, University of Padua, Italy*

**Renewable Energy and Storage: A Diffusion Analysis**
**Presenter: Anjali Nursimulu, Energy Center, Ecole Polytechnique Fédérale de Lausanne, Switzerland**

**Presenter: Davide Caminanti, Energy Consultant, Italy**

**Stochastic system LCOE and optimal integration of intermittting renewable sources**
**Presenter: Carlo Mari, University of Pescara**

#### 18 Behavioural energy economics
*Chair: Sonnenschein Jonas, IIIEE, Lund University*

**An integrated and participatory sustainable urban-energy planning methodology for the city of Cesena**
**Presenter: Rocco De Miglio, E4MSA srl, Italy**

**Switch off the light, please! Energy consumption, aging population and consumption habits**
**Presenter: Rossella Bardazzi, University of Florence, Department of Economics and Management, Italy**

**Household customers choice of electricity retailer**
**Presenter: Kari-Anne Fange, Ostfold University College, Norway**

### 10.30-11.30 Dual Plenary Sessions

#### Energy challenges in the industrial sectors: the transition to a low-carbon economy
*Chair: Federico Boffa University of Macerata*

**Environmental policies in the Big Three: EU, US, and China, In a Bayesian DSGE model**
**Presenter: Carlo Andrea Bollino, University of Perugia & AIEE, Italy**

**Evaluation of energy consumption and air pollution externalities due to cruise ships in ports**
**Presenter: Manolis Souliotis, Department of Mechanical Engineering, University of Western Macedonia, Kozani, Greece**

**Fossil fuels assets' exposure to carbon policy: will stranding risk increase in a post COP21 agreement world?**
**Presenter: Isabella Alloisio, Fondazione Eni Enrico Mattei, Italy**

#### Europe Roadmap to 2050 and the future strategies of the energy industry
*Chair: Felice Egidì, Head of European Public Affairs Enel*

**The Political Economy of Energy Innovation**
**Presenter: Elena Verdolini, Fondazione Eni Enrico Mattei & Euro-Mediterranean Centre on Climate Change, Italy**

**Consumer and value creation in the utility of the future: an experiment in the Italian solar PV market**
**Presenter: Veronica Galassi, Institute for Future Energy Consumer Needs and Behavior (FCN), RWTH Aachen University, Germany**

**The RES-induced Switching Effect Across Fuels: an Analysis of the Italian Balancing Prices with Their Connected Costs**
**Presenter: Angelica Gianfreda, University of Milano-Bicocca, Italy**

### 11.30-13.00 Concurrent Sessions (21-24)

#### Technology development - grid management
*Chair: Francesco Margherella, AIEE, Italy*

**Distribution network vulnerability assessment**
**Presenter: Alfonso Santos, IX Estudos e Projetos Ltda, Brasil**

**Economic optimization of electricity supply security in light of the interplay between transmission system and distribution system operator**
**Presenter: Olivier Borne, Centrale Supélec, France**

#### KAPSARC Special Session

**Discussion of the Special Issue of the Energy Journal: "Renewables and Diversification in Heavily Energy Subsidized Economies"**
*Chair: Axel Pierru, KAPSARC, Saudi Arabia*

**Discussants:**
- Carlo Andrea Bollino, AIEE, Italy
- Tarek Atalla, KAPSARC, Saudi Arabia
- Marzio Galeotti, Department of Environmental and Energy Economics University of Milan, Italy
- Tooraj Jamsb, Durham Energy Institute. U.K
- Lucia Visconti Parisio, University Bicocca, Italy
13.00-14.00  Lunch and "Best Student Paper Award Ceremony"

14.00-15.00  Plenary Session

**European perspectives in the global energy context**
*Chair: Carlo Andrea Bollino, President AIEE*

- **Laura Cozzi**, Head Demand Division, World Energy Outlook
- **Samuele Furfari**, Adviser to the Director General of DG Energy at the European Commission
- **Marco Margheri**, President WEC Italy

15.00-16.30  Concurrent Sessions (25-26)

**23 Climate policy and emission trading**
*Chair: Antonio Geracitano, EOS Consulting*

A multicriteria assessment approach to the energy trielmma
Presenter: Pliousis Athanasios, Technical University of Crete, Greece
Authors: Andriosopoulos Kostas, Michael Dompous, Athanasios Pliousis

Climate Change, Hydropower Dam Capacity, and Flood-Overtopping
Presenter: Yuan Niu, Department of Agricultural and Resource Economics, University of Connecticut, USA
Author: Niu Yuan, Farhed Shah

Environmental taxation in a globalized economy
Presenter: Agime Gerbeti, LUMSA University, Italy
Author: Agime Gerbeti

Policy Adaptation for Scaling up Renewables
Presenter: Jaime Legerén Álvarez, Energy Center, École Polytechnique Fédérale de Lausanne, Switzerland
Author: Legerén Álvarez Jaime, Anjali Nursimulu

**24 Policies for Res technologies**
*Chair: Lucia Visconti Parisio, University of Milano Bicocca, Italy*

A bibliometric analysis based review on wind power price
Presenter: Sun Mei, Center For Energy Development and Environmental Protection - Jiangsu University, China
Author: Gao Cuixia, Mei Sun, Yong Geng, Ryi Wu, Wei Chen

The impact of electricity subsidy removal on renewable electricity generation. The case of Bangladesh
Presenter: Sakib Amin, North South University, Dhaka, Bangladesh
Author: Amin Sakib

Regional redistribution effects of support to renewables
Presenter: Alessandro Sapio, Parthenope University of Naples, Italy
Author: Sapio Alessandro

Optimization Strategies for Sustainable Energy Development in Angola – A Multi-Stage Approach
Presenter: Artur Barreiros, Departamento de Engenharia Mecânica, Instituto Superior Técnico, Universidade de Lisboa, Portugal
Authors: Jone Heitor, Artur Barreiros, Barradas Cardoso

Impact of Emission Trading on the Energy-mix
Presenter: Paolo Falbo, University of Brescia
Authors: A. Bersani, Paolo Falbo, Loretta Mastroeni